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INTERIM REPORT ON ECONOMIC AND MANPOWER FORECASTING. VOLUME II.(U)  
JUL 79

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APPENDIX I

WHARTON ANNUAL LABOR FORCE MODEL EQUATIONS

## **DISCLAIMER NOTICE**

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1. Civilian Noninstitutional Population

$$\text{NPCN\&} = (\text{NPT\&} * (1.0 - \text{R\&} / 100.)) - (\text{W\&} * \text{NLM})$$

Where

R& = Percentage of a group's total population institutionalized,

W& = Ratio of Armed Forces of that group to the total Armed Forces,

and

$$\begin{aligned} \& = & \text{M16.17, M18.19, M20.24, M25.29, M30.34, M35.39, M40.44,} \\ & \text{M45.49, M50.54, M55.59, M60.64, M65.69, M70+, F16.17,} \\ & \text{F18.19, F20.24, F25.29, F30.34, F35.39, F40.44, F45.49,} \\ & \text{F50.54, F55.64, F65.70, F70+} \end{aligned}$$

2. Armed Forces, Male, Ages 16 to 17

$$\text{NLMM16.19} = \text{NPTM16.17} * \text{WM16.17} + \text{NPTM18.19} * \text{WM18.19}$$

3. Civilian Noninstitutional Population:

Male, Ages 16 to 19,

$$\text{NPCNM16.19} = \text{NPCNM16.17} + \text{NPCNM18.19};$$

Male, ages 25 to 34,

$$\text{NPCNM25.34} = \text{NPCNM25.29} + \text{NPCNM30.34};$$

Male, ages 35 to 44,

$$\text{NPCNM35.44} = \text{NPCNM35.39} + \text{NPCNM40.44};$$

Male, ages 45 to 54,

$$\text{NPCNM45.54} = \text{NPCNM45.49} + \text{NPCNM50.54};$$

Male, ages 55 to 64,

$$\text{NPCNM55.64} = \text{NPCNM55.59} + \text{NPCNM60.64}$$

Male, ages 65 and over,

$$\text{NPCNM65+} = \text{NPCNM65.64} + \text{NPCNM70+};$$

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Female, Ages 16 to 19,

$\text{NPCNF16.19} = \text{NPCNF16.17} + \text{NPCNF18.19};$

Female, Ages 25 to 34,

$\text{NPCNF25.34} = \text{NPCNF25.29} + \text{NPCNF30.34};$

Female, ages 35 to 44,

$\text{NPCNF35.44} = \text{NPCNF35.39} + \text{NPCNF40.44};$

Female, Ages 45 to 54,

$\text{NPCNF45.54} = \text{NPCNF45.49} + \text{NPCNF50.54};$

Female, ages 55 to 64,

$\text{NPCNF55.64} = \text{NPCNF55.59} + \text{NPCNF60.64};$

Female, ages 65 and over,

$\text{NPCNF65+} = \text{NPCNF65.69} + \text{NPCNF70+}.$



4. Civilian Noninstitutional Population, Total, Male, Ages 16 and over

$$\begin{aligned} \text{NPCNM16+} &= \text{NPCNM16.19} + \text{NPCNM20.24} + \text{NPCNM25.34} + \\ &\quad \text{NPCNM35.44} + \text{NPCNM45.54} + \text{NPCNM55.64} + \\ &\quad \text{NPCNM65+}; \end{aligned}$$

5. Civilian Noninstitutional Population, Total, Female, Ages 16 and over,

$$\begin{aligned} \text{NPCNF16+} &= \text{NPCNF16.19} + \text{NPCNF20.24} + \text{NPCNF25.34} + \\ &\quad \text{NPCNF35.44} + \text{NPCNF45.54} + \text{NPCNF55.64} + \\ &\quad \text{NPCNF65+}. \end{aligned}$$

6. Civilian Noninstitutional Population, Total, Ages 16 and Over

$$\text{NPCN16+} = \text{NPCNM16+} + \text{NPCNF16+}$$

7. Civilian Resident Population, Total (Age 16 and over) (Millions) = NPC16+

$$\text{NPC16+} = \text{NPT16+} - \text{NLM}$$

8. Civilian Resident Population, Male, Ages 16 and over (Millions)

$$\text{NPCM16+} = \text{NPTM16+} - \text{WM16+} * \text{NLM}$$

where WM16+ = Ratio of Males in the Armed Forces to Total Armed Forces

9. Civilian Resident Population, Female, Age 16 and Over (Millions)

$$\text{NPCF16+} = \text{NPTF16+} - \text{WF16+} * \text{NLM}$$

where WF16+ = Ratio of Males in the Armed Forces to Total Armed Forces



10. Civilian Resident Population, Total, Ages 16 and Over (Millions)

$$\text{NPC16+} = \text{NPCM16+} + \text{NPCF16+}$$

11. School Enrollment Male, Ages 16 to 17 (Millions)

$$\frac{\text{NPSM16.17}}{\text{NPCNM16.17}} = \frac{0.6623}{(3.2581)} + \frac{0.4382 * \text{MWR}}{(3.7706)}$$

$$- \frac{0.5984}{(-3.3820)} * (\text{NLMM16.19} / \text{NPCNM16.19})$$

$$+ \frac{0.1218}{(0.6189)} * Y$$

$$R^2 = 0.665$$

$$\text{SEE} = .0217$$

$$\text{DW} = 1.364$$

Mean of DV = 0.8858

Sample Period: 1955 to 1976

Equation is solved for NPSM16.17 for forecasting

$$\begin{aligned} Y = & (\text{YPD}/\text{NCF}) / (0.438 * (\text{YPD}(-1) / \text{NCF}(-1))) \\ & + 0.219 * (\text{YPD}(-2) / \text{NCF}(-2)) + 0.146 * \\ & (\text{YPD}(-3) / \text{NCF}(-3)) + 0.110 * (\text{YPD}(-4) / \\ & \text{NCF}(-4)) + 0.087 * (\text{YPD}(-5) / \text{NCF}(-5)) \end{aligned}$$

12. School Enrollment, Male, Ages 18 to 19 (Millions)

$$\frac{NPSM18.19}{NPCNM18.19} = -.7951 + .5812 * MWR$$

$$(-1.4645) \quad (2.0879)$$

$$+ .1135 * NPSRM16.17W(-1) + .9054 * Y$$

$$(.2682) \quad (2.2801)$$

$$+ .5183 * (NLMINDTT / 1000. * (NPCNM16.19$$

$$(.3801)$$

$$+ NPCNM20.24)) + 0.0070 * NRUTM16.19$$

$$(.7641)$$

$$- 0.1138 * NRUTM25.54W$$

$$(-.4809)$$

$$\bar{R}^2 = 0.547$$

$$SEE = 0.0362$$

$$DW = 1.493$$

$$\text{Mean of DV} = .5122$$

Sample Period: 1955 to 1976

Equation is solved for NPSM18.19 for forecasting

$$NPSRM16.17W = ((NPSM16.17/3.) + (NPSM16.17(-1)$$

$$* 2.(3.)) / NPCNM16.17$$

$$Y = (YPD/NCF) / (0.438 * (YPD(-1) / NCF(-1)) + 0.219 *$$

$$(YPD(-2) / NCF(-2)) + 0.146 * (YPD(-3) / NCF(-3)) +$$

$$0.110 * (YPD(-4) / NCF(-4)) + 0.087 * (YPD(-5) / NCF(-5)))$$

13. School Enrollment, Male, Ages 20 to 24 (Millions)

$$\frac{NPSM20.24}{NPCNM20.24} = \begin{matrix} -.2019 & + & .3662 * MWR \\ (-1.5727) & & (4.2869) \end{matrix}$$

$$+ \begin{matrix} .3046 * NPSRM18.19W(-1) & + & .1871 * Y \\ (3.6378) & & (1.5350) \end{matrix}$$

$$+ \begin{matrix} .7549 * (NLMINDTT / 1000 * (NPCNM16.19 \\ (1.9565) \end{matrix}$$

$$+ NPCNM20.24)) + \begin{matrix} 0.0436 * LOG(ED) \\ (1.6442) \end{matrix}$$

$$\bar{R}^2 = .917$$

$$SEE = .0121$$

$$DW = 2.280$$

$$\text{Mean of DV} = 0.2544$$

Sample Period: 1955 to 1976

Equation is solved for NPSM20.24 for forecasting.

$$ED = GVPSOED / (NPT00.04 + NPT05.09 + NPT10.14 + NPCN16.19 \\ + NPCN20.24$$

$$NPSRM18.19W = ((NPSM18.19/3.) + (NPSM18.19(-1) * 2./3.)) / NPCNM18.19$$

$$Y = (YPD/NCF) / (0.438 * (YPD(-1) / NCF(-1)) + 0.219 * \\ (YPD(-2) / NCF(-2)) + 0.146 * (YPD(-3) / NCF(-3)) + \\ 0.110 * (YPD(-4) / NCF(-4)) + 0.087 * (YPD(-5) / NCF(-5)))$$

14. School Enrollment, Female, Ages 16 to 19 (Millions)

$$\frac{NPSF16.19}{NPCNF16.19} = \begin{matrix} 0.4095 \\ (4.9158) \end{matrix} + \begin{matrix} 0.2841 \\ (2.6034) \end{matrix} * MWR$$

$$- \begin{matrix} 0.0007 \\ (-1.2994) \end{matrix} * NPFR15.19(-1)$$

$$+ \begin{matrix} 0.0150 \\ (4.8232) \end{matrix} * NRUTF16.19 - \begin{matrix} 0.0173 \\ (-3.1811) \end{matrix} * NRUTM25.54$$

$$\bar{R}^2 = 0.909$$

$$SEE = 0.0157$$

$$DW = 1.000$$

Mean of DV = 0.6119

Sample Period: 1955 to 1976

Equation is solved for NPSF16.19 for forecasting.

15. School Enrollment, Female, Ages 20 to 24 (Millions)

$$\frac{NPSF20.24}{NPCNF20.24} = \frac{0.1532}{(6.3713)} + \frac{0.1574}{(3.2406)} * MWR$$

$$- \frac{0.0003}{(-2.6480)} * NPFR20.24(-1) + \frac{0.1070}{(3.6646)} * LOG(ED)$$

$$+ \frac{0.0025}{(2.3540)} * NRUTF20.24$$

$$\bar{R}^2 = 0.976$$

$$SEE = 0.0069$$

$$DW = 2.464$$

$$\text{Mean of DV} = 0.1244$$

Sample Period: 1955 to 1976

Equation is solved for NPSF20.24 for forecasting.

$$ED = GVPSOED / (NPT00.04 + NPT05.09 + NPT10.14 + NPCN16.19 \\ + NPCN20.24 + NPT15)$$



16. School Enrollment Rates (Fractions)

$$NPSR\& = ((NPS\& / 3) + (2 * NPS\&(-1) / 3)) / NPCN\&$$

where & = M16.17, M18.19, M20.24, F16.19, F20.24

17. School Enrollment, Male, Ages 16 to 19 (Millions)

$$NPSM16.19 = NPSM16.17 + NPSM18.19$$

18. School Enrollment Rate, Male, Ages 16 to 19 (Fraction)

$$NPSRM16.19 = (NPSM16.19 / 3) + (2 * NPSM16.19(-1) / 3) \\ / NPCNM16.19$$

19. Labor Force Participation Rate, Male, Ages 16 to 19 (Fraction)

$$\text{LOG}(\text{NRLTM16.19}) = 0.4346 - 0.0347 * \text{NRUTM25.54W} \\ (2.2513)(-3.8103)$$

$$- 1.0152 * \text{NPSRM16.19} - 8.0964 * (\text{NLM} / \text{NPCN16+}) \\ (-4.9413) \quad (-4.4667)$$

$$\bar{R}^2 = 0.538$$

$$\text{SEE} = 0.0293$$

$$\text{DW} = 0.591$$

Mean of DV = -0.5683

Sample Period: 1954 to 1976

Equation is solved for NRLTM16.19 for forecasting

$$\text{NRUTM25.54W} = .667 * \text{NRUTM25.54} + .333 * \text{NRUTM25.54}(-1)$$

20. Labor Force Participation Rate, Male, Ages 20 to 24 (Fraction)

$$\text{LOG}(\text{NRLTM20.24}) = 0.0734 - 0.0032 * (.667 * \text{NRUTM25.54})$$

(2.0214) (-1.5695)

$$+ .333 * \text{NRUTM25.54}(-1) + 0.0737 *$$

(-2.9648)

$$* \text{LY} - 0.3294 * \text{NPSRM20.24}$$

(-4.3145)

$$- 2.4428 * (\text{NLM} / \text{NPCN16+})$$

(-3.6356)

$$\bar{R}^2 = 0.916$$

$$\text{SEE} = 0.0058$$

$$\text{DW} = 1.596$$

$$\text{Mean of DV} = -0.1547$$

Sample Period: 1954 to 1976

Equation is solved for NRLTM20.24 for forecasting

$$\text{LY} = \text{LOG}((0.8145 * \text{YPDPC} + 0.6634 * \text{YPDPC}(-1) +$$

$$0.5404 * \text{YPDPC}(-2) + 0.4401 * \text{YPDPC}(-3)) / 2.4584)$$

21. Labor Force Participation Rate, Male, Ages 25 to 34 (Fraction)

$$\text{LOG}(\text{NRLTM25.34}) = 0.0742 - 0.0013 * (.667 * \text{NRUTM25.54} + (6.1831)(-2.6969)$$

$$.333 * \text{NRUTM25.54}(-1)) - 0.0022 * \text{RPW} - (-4.2490)$$

$$0.0170 * \text{LY} (-2.3466)$$

$$\bar{R}^2 = 0.931$$

$$\text{SEE} = 0.0021$$

$$\text{DW} = 1.233$$

Mean of DV: -0.0327

Sample Period: 1954 to 1976

Equation is solved for NRLTM25.34 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

$$\text{LY} = \text{LOG}((0.8145 * \text{YPDPC} + 0.6634 * \text{YPCPC}(-1) + 0.5404 * \text{YPDPC}(-2) + 0.4401 * \text{YPDPC}(-3)) / 2.4584)$$

22. Labor Force Participation Rate, Male, Ages 35 to 44 (Fraction)

$$\text{LOG}(\text{NRLTM35.44}) = 0.0421 - 0.0016 * (.667 * \text{NRUTM25.54} + (6.2390)(-6.0822)$$

$$.333 * \text{NRUTM25.54}(-1)) - .0005 * \text{RPW} (-1.6102)$$

$$- .0425 * \text{LY} (-10.4448)$$

$$\bar{R}^2 = 0.979$$

$$\text{SEE} = 0.0012$$

$$\text{DW} = 1.299$$

$$\text{Mean of DV} = -0.0291$$

Sample Period: 1954 to 1976

Equation is solved for NRLTM35.44 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

$$\text{LY} = \text{LOG} (0.8145 * \text{YPDPC} + 0.6634 * \text{YPDPC}(-1) + 0.5404 * \text{YPDPC}(-2) + 0.4401 * \text{YPDPC}(-3)) / 2.4584)$$



23. Labor Force Participation Rate, Male, Ages 45 to 54 (Fraction)

$$\text{LOG}(\text{NRLTM45.54}) = 0.1171 - 0.0032 * (.667 * \text{NRUTM25.54} + \\ (9.0358) (-6.0867)$$

$$.333 * \text{NRUTM25.54}(-1)) - 0.0021 * \text{RPW} \\ (-3.7393)$$

$$- 0.0708 * \text{LY} \\ (-9.0749)$$

$$\bar{R}^2 = 0.981$$

$$\text{SEE} = 0.0023$$

$$\text{DW} = 1.827$$

$$\text{Mean of DV} = -0.0527$$

Sample Period: 1954 to 1976

Equation is solved for NRLTM45.54 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \\ \text{NPCN16+}$$

$$\text{LY} = \text{LOG}((0.8145 * \text{YPDPC} + 0.6634 * \text{YPDPC}(-1) + \\ 0.5404 * \text{YPDPC}(-2) + 0.4401 * \text{YPDPC}(-3)) / 2.4584)$$

24. Labor Force Participation Rate, Male, Ages 55 to 64 (Fraction)

$$\text{LOG}(\text{NRLTM55.64}) = 0.3655 - 0.0094 * (667 * \text{NRUTM25.54} + (6.1501) (-3.9610)$$

$$.333 * \text{NRUTM25.54}(-1)) - 0.0071 * \text{RPW} (-2.8001)$$

$$- 0.2100 * \text{LY} (-5.8657)$$

$$\bar{R}^2 = 0.959$$

$$\text{SEE} = 0.0103$$

$$\text{DW} = 0.980$$

$$\text{Mean of DV} = -0.1752$$

Sample Period: 1954 to 1976

Equation solved for NRLTM55.64 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16} +$$

$$\text{LY} = \text{LOG}(0.8145 * \text{YPDPC} + 0.6634 * \text{YPDPC}(-1) + 0.5404 * \text{YPDPC}(-2) + 0.4401 * \text{YPDPC}(-3)) / 2.4584)$$

25. Labor Force Participation Rate, Male, Ages 65 and Over (Fraction)

$$\text{LOG}(\text{NRUTM65+}) = -0.1060 - 0.0184 * (.667 * \text{NRUTM25.54} + .333 * (-0.6363)(-3.3949)$$

$$\text{NRUTM25.54}(-1) + 0.0186 * \text{RPW} - 0.2812 * \text{LY} \\ (1.0068) \quad (-1.3962)$$

$$+ 0.8657 * \text{LOG}(\text{NRLTM65+}(-1)) \\ (8.5414)$$

$$\bar{R}^2 = 0.990$$

$$\text{SEE} = 0.0203$$

$$\text{DW} = 2.236$$

$$\text{Mean of DV} = -1.2391$$

Sample Period: 1954 to 1976

Equation is solved for NRLTM65+ for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

$$\text{LY} = \text{LOG}(0.8145 * \text{YPDPC} + 0.6634 * \text{YPDPC}(-1) + 0.5404 * \text{YPDPC}(-2) + 0.4401 * \text{YPDPC}(-3)) / 2.4584$$

26. Labor Force Participation Rate, Female, Ages 16 to 19 (Fraction)

$$\text{LOG}(\text{NRLTF16.19}) = -3.8285 + 0.9340 \text{ LOG}(\text{WW})$$

(-3.0822) (3.7520)

$$- 0.0939 * \text{NPFR}(-1) - 2.3346 * \text{NPSRF16.19}$$

(-3.1143) (-4.8475)

$$\bar{R}^2 = 0.923$$

$$\text{SEE} = 0.0251$$

$$\text{DW} = 1.112$$

$$\text{Mean of DV} = -0.8693$$

Sample Period: 1954 to 1976

Equation is solved for NRLTF16.19 for forecasting

$$\text{WW} = .667 * \text{W} + .333 * \text{W}(-1)$$

$$\text{W} = ((\text{WRCPV\$} * \text{NEETTPV}) - (\text{TSCSTT\$} - \text{TXCSTP\$})) / (\text{NEETTPV} \\ * \text{PDCE} / 100.)$$

27. Labor Force Participation Rate, Female, Ages 20 to 24 (Fraction)

$$\text{LOG}(\text{NRLTF20.24}) = -1.3831 + 0.2280 * \text{LOG}(\text{WW})$$

(-3.5450)      (3.2383)

$$- 0.1342 * \text{NPFR}(-1)$$

(-8.9510)

$$\bar{R}^2 = 0.983$$

$$\text{SEE} = 0.0165$$

$$\text{DW} = 1.057$$

$$\text{Mean of DV} = -0.6539$$

Sample Period: 1954 to 1976

Equation is solved for NRLTF20.24 for forecasting

$$\text{WW} = .667 * \text{W} + .333 * \text{W}(-1)$$

$$\text{W} = ((\text{WRCPV\$} * \text{NEETTPV}) - (\text{TSCSTT\$} - \text{TSCSTP\$})) / (\text{NEETTPV}$$

$$* \text{PDCE} / 100.)$$



28. Labor Force Participation Rate, Female, Ages 25 to 34 (Fraction)

$$\text{LOG(NRLTF25.34)} = -1.0731 + 0.1536 * \text{LOG(WW)} - 0.1949 * \text{NPFR}(-1) \\ (-1.3043) \quad (1.0349) \quad (-6.1629)$$

$$\bar{R}^2 = 0.952$$

$$\text{SEE} = 0.0349$$

$$\text{DW} = 0.578$$

$$\text{Mean of DV} = -0.8912$$

Sample Period: 1954 to 1976

Equation is solved for NRLTF25.34 for forecasting

$$\text{WW} = .667 * W + .333 * W(-1)$$

$$W = ((\text{WRCPVS} * \text{NEETTPV}) - (\text{TXCSTTS} - \text{TXCSTPS})) / (\text{NEETTPV} * \text{PDCE} \\ / 100.)$$

29. Labor Force Participation Rate, Female, Ages 35 to 44 (Fraction)

$$\begin{aligned}\text{LOG}(\text{NRLTF35.44}) &= -4.1483 + 0.747 * \text{LOG}(\text{WW}) - \\ &\quad (-48.2812) \quad (38.6392) \\ &\quad - 0.0813 * \text{NPFR9} \\ &\quad (-9.9692)\end{aligned}$$

$$\bar{R}^2 = 0.986$$

$$\text{SEE} = 0.0118$$

$$\text{DW} = 1.141$$

Mean of DV = -0.7485

Sample Period: 1954 to 1976

Equation is solved for NRLTF35.44 for forecasting

$$\text{NPFR9} = (\text{NPFR}(-9) + \text{NPFR}(-10) + \text{NPFR}(-11)) / 3.0$$

$$\text{WW} = .667 * \text{W} + .333 * \text{W}(-1)$$

$$\begin{aligned}\text{W} &= ((\text{WRCPV\$} * \text{NEETTPV}) - (\text{TXCSTT\$} - \text{TXCSTP\$})) / (\text{NEETTPV} * \text{PDCE} \\ &\quad / 100.)\end{aligned}$$

30. Labor Force Participation Rate, Female, Ages 45 to 54 (Fraction)

$$\text{LOG(NRLTF45.54)} = -4.8360 + 0.9019 * \text{LOG(WW)} - 0.1101 * \text{NPRR19}$$
$$(-4.7850) \quad (3.7972) \quad (-1.8233)$$

$$\bar{R}^2 = 0.849$$

$$\text{SEE} = 0.0298$$

$$\text{DW} = 0.367$$

Mean of DV = -0.6813

Sample Period: 1954 to 1976

Equation is solved for NRLTF45.54 for forecasting

$$\text{NPRR19} = (\text{NPFR}(-19) + \text{NPFR}(-20) + \text{NPFR}(-21)) / 3.0$$

$$\text{WW} = .667 * \text{W} + .333 * \text{W}(-1)$$

$$\text{W} = ((\text{WRCPV\$} * \text{NEETTPV}) - (\text{TXCSTTS} - \text{TXCSTP\$})) / (\text{NEETTPV} * \text{PDCE} / 100.)$$

31. Labor Force Participation Rate, Female, Ages 55 to 65 (Fraction)

$$\text{LOG(NRLTF55.64)} = -3.5759 + 0.6098 * \text{LOG(WW)} - 0.1629 * \text{NPFR29}$$

(-23.2850) (19.8403) (-9.6903)

$$\bar{R}^2 = 0.954$$

$$\text{SEE} = 0.0212$$

$$\text{DW} = 1.091$$

Mean of DV = -0.9424

Sample Period: 1954 to 1976

Equation is solved for NRLTF55.64 for forecasting

$$\text{NPRFR29} = (\text{NPFR}(-29) + \text{NPFR}(-30) + \text{NPFR}(-31)) / 3.0$$

$$\text{WW} = .667 * \text{W} + .333 * \text{W}(-1)$$

$$\text{W} = ((\text{HRCPV\$} * \text{NEETTPV}) - (\text{TXCSTT\$} - \text{TXCSTP\$})) / (\text{NEETTPV} * \text{PDCE} / 100.)$$

32. Labor Force Participation Rate, Female, Ages 65 and Over (Fraction)

$$\text{LOG(NRLTF65+)} = -1.1499 - 0.0310 * \text{RPW} \\ (-7.7693)(-8.0166)$$

$$\bar{R}^2 = 0.743$$

$$\text{SEE} = 0.0417$$

$$\text{DW} = 1.113$$

$$\text{Mean of DV} = -2.3343$$

Sample Period: 1954 to 1976

Equation is solved for NLTF65+ for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$



33. Unemployment Rate, Male, Ages 16 to 19 (Percent)

$$\text{LOG}(\text{NRUTM16.19}) = -1.6102 + 0.3761 * \text{LOG}(\text{NRUTM25.54}) +$$

(-1.3387)      (6.7071)

$$1.0542 * \text{LOG}(\text{RPW})$$

(3.2043)

$$\bar{R}^2 = 0.703$$

$$\text{SEE} = 0.0937$$

$$\text{DW} = 0.500$$

$$\text{Mean of DV} = 2.6747$$

Sample Period: 1954 to 1976

Equation is solved for NRUTM16.19 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

34. Unemployment Rate, Male, Ages 20 to 24 (Percent)

$$\text{LOG}(\text{NRUTM20.24}) = -3.7337 + 0.8147 * \text{LOG}(\text{NRUTM25.54}) + (-0.6665)(17.590)$$

$$1.3367 * \text{LOG}(\text{RPW}) \\ (4.7989)$$

$$\bar{R}^2 = 0.934$$

$$\text{SEE} = 0.0794$$

$$\text{DW} = 0.978$$

Mean of DV = 2.0982

Sample Period: 1954 to 1976

Equation is solved for NRUTM20.24 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

35. Unemployment Rate, Male, Ages 25 to 34 (Percent)

$$\text{LOG}(\text{NRUTM25.34}) = 1.9444 \sum_{i=0}^3 a_i * \text{LOG}(\text{NEHT}(-i) / \text{NEHT}(-1-i))$$

(14.7644)  $i=0$  <1, 4, FAR>

i	$a_i$	t-Statistic
0	-16.1178	-5.1241
1	-12.0884	-5.1241
2	-8.0589	-5.1241
3	-4.0295	-5.1241
<hr/>		
SUM	-40.2946	

$$\bar{R}^2 = 0.535$$

$$\text{SEE} = 0.2510$$

$$\text{DW} = 0.356$$

Mean of DV = 1.3252

Sample Period: 1954 to 1976

Equation is solved for NRUTM25.34 for forecasting

36. Unemployment Rate, Male, Ages 25 to 34, Alternate Equation (Percent)

$$\begin{aligned} \text{LOG}(\text{NRUTM25.34}) &= 1.9870 + \sum_{i=0}^3 a_i * \text{LOG}(\text{NEHT}(-i) / \text{NEHT}(-1-i)) \\ &\quad (15.4864) \quad <1, 4, \text{FAR}> \\ &+ \sum_{i=0}^3 b_i * \text{LOG}(\text{NLCM25.34}(-i) / \text{NLCM25.34}(-1-i)) \\ &\quad <1, 4, \text{FAR}> \end{aligned}$$

i	a	t-Statistic	b	t-Statistic
0	-18.6226	-5.5762	1.8391	1.7246
1	-13.9670	-5.5762	1.3793	1.7246
2	-9.3113	-5.5762	0.9196	1.7246
3	-4.6557	-5.5762	0.4598	1.7246
SUM	-46.5565		4.5978	

$$\bar{R}^2 = 0.575$$

$$\text{SEE} = 0.2399$$

$$\text{DW} = 0.461$$

Mean of DV = 1.3252

Sample Period: 1954 to 1976

Equation is solved for NRUTM25.34 for forecasting

To use set ALTE NRUTM25.34 1 in solution.

37. Unemployment Rate, Male, Ages 35 to 44 (Percent)

$$\text{LOG}(\text{NRUTM35.44}) = 1.7470 + \sum_{i=0}^3 d_i * \text{LOG}(\text{NEHT}(-i) / \text{NEHT}(-1-i))$$

(17.9168)      <1, 4, FAR>

i	d <sub>i</sub>	t-Statistic
0	-17.6002	-7.5572
1	-13.2002	-7.5572
2	-8.8001	-7.5572
3	-4.4001	-7.5572
SUM	-44.0005	

$$\bar{R}^2 = 0.718$$

$$\text{SEE} = 0.1858$$

$$\text{DW} = 0.501$$

Mean of DV = 1.0708

Sample Period: 1954 to 1976

Equation is solved for NRUTM35.44 for forecasting



38. Unemployment Rate, Male, Ages 45 to 54 (Percent)

$$\text{LOG}(\text{NRUTM45.54}) = 1.8158 + \sum_{i=0}^3 a_i * \text{LOG}(\text{NEHT}(-i) / \text{NEHT}(-1-i))$$

(19.4369)      <1, 4, FAR>

i	a <sub>i</sub>	t-Statistic
0	-18.4860	-8.2850
1	-13.8645	-8.2850
2	-9.2430	-8.2850
3	-4.6215	-8.2850
SUM	-46.2151	

$$\bar{R}^2 = 0.755$$

$$\text{SEE} = 0.1780$$

$$\text{DW} = 0.494$$

Mean of DV = .1.1055

Sample Period: 1954 to 1978

Equation is solved for NRUTM45.54 for forecasting

39. Unemployment Rate, Male, Ages 55 to 64 (Percent)

$$\text{LOG}(\text{NRUTM55.64}) = \begin{matrix} 6.8357 \\ (8.3511) \end{matrix} + \begin{matrix} 0.8115 \\ (21.2645) \end{matrix} * \text{LOG}(\text{NRUTM25.54})$$

$$\begin{matrix} -1.7972 \\ (-8.0275) \end{matrix} * \text{LOG}(\text{RPW})$$

$$\bar{R}^2 = 0.960$$

$$\text{SEE} = 0.0638$$

$$\text{DW} = 1.803$$

Mean of DV = 1.2459

Sample Period: 1954 to 1976

Equation is solved for NRUTM55.64 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

40. Unemployment Rate, Males, Ages 65 and Over (Percent)

$$\begin{aligned}\text{LOG}(\text{NRUTM65+}) &= 2.2688 + 0.6320 * \text{LOG}(\text{NRUTM25.54}) \\ &\quad (2.3420) \quad (13.9915) \\ &\quad - 0.4610 * \text{LOG}(\text{RPW}) \\ &\quad (-1.7399)\end{aligned}$$

$$\bar{R}^2 = 0.900$$

$$\text{SEE} = 0.0755$$

$$\text{DW} = 1.957$$

$$\text{Mean of DV} = 1.3353$$

Sample Period: 1954 to 1976

Equation is solved for NRUTM65+ for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

41. Unemployment Rate, Female, Ages 16 to 19 (Percent)

$$\text{LOG}(\text{NRUTF16.19}) = -3.2326 + 0.1447 * \text{LOG}(\text{NRUTM25.54})$$

(-1.7506)      (1.6810)

$$+ 1.5757 * \text{LOG}(\text{RPW})$$

(3.1198)

$$\bar{R}^2 = 0.318$$

$$\text{SEE} = 0.1439$$

$$\text{DW} = 0.377$$

Mean of DV = 2.6793

Sample Period: 1954 to 1976

Equation is solved for NRUTF16.19 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

42. Unemployment Rate, Female, Ages 20 to 24 (Percent)

$$\begin{aligned}\text{LOG}(\text{NRUTF20.24}) = & -5.0239 + 0.4009 * \text{LOG}(\text{NRUTM25.54}) \\ & (-3.5743) \quad (6.1184) \\ & + 1.8232 * \text{LOG}(\text{RPW}) \\ & (4.7426)\end{aligned}$$

$$\bar{R}^2 = 0.718$$

$$\text{SEE} = 0.1095$$

$$\text{DW} = 0.432$$

$$\text{Mean of DV} = 2.0924$$

Sample Period: 1954 to 1976

Equation is solved for NRUTF20.24 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$



43. Unemployment Rate, Female, Ages 25 to 34 (Percent)

$$\text{LOG}(\text{NRUTF25.34}) = -2.6612 + 0.4494 * \text{LOG}(\text{NRUTM25.54})$$

(-2.8279) (10.2434)

$$+ 1.0792 * \text{LOG}(\text{RPW})$$

(4.1929)

$$\bar{R}^2 = 0.843$$

$$\text{SEE} = 0.0733$$

$$\text{DW} = 1.254$$

Mean of DV = 1.8016

Sample Period: 1954 to 1976

Equation is solved for NRUTF25.34 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

44. Unemployment Rate, Females, Ages 35 to 44 (Percent)

$$\begin{aligned}\text{LOG}(\text{NRUTF35.44}) &= -0.9221 + 0.5150 * \text{LOG}(\text{NRUTM25.54}) \\ &\quad (-0.8899) \quad (10.6602) \\ &\quad + 0.5097 * \text{LOG}(\text{RPW}) \\ &\quad (1.7984)\end{aligned}$$

$$\bar{R}^2 = 0.838$$

$$\text{SEE} = 0.0807$$

$$\text{DW} = 1.441$$

$$\text{Mean of DV} = 1.5429$$

Sample Period: 1954 to 1976

Equation is solved for NRUF35.44 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

45. Unemployment Rate, Female, Ages 45 to 54 (Percent)

$$\begin{aligned} \text{LOG}(\text{NRUTF45.54}) = & -1.0170 + 0.6049 * \text{LOG}(\text{NRUTM25.54}) \\ & (-1.4252) \quad (18.1793) \\ & + 0.4477 * \text{LOG}(\text{RPW}) \\ & (2.2937) \end{aligned}$$

$$\bar{R}^2 = 0.938$$

$$\text{SEE} = 0.0556$$

$$\text{DW} = 2.198$$

Mean of DV = 1.3284

Sample Period: 1954 to 1976

Equation is solved for NRUTF45.54 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

46. Unemployment rate, Females, Ages 55 to 64 (Percent)

$$\text{LOG}(\text{NRUTF55.64}) = -0.7301 + 0.6708 * \text{LOG}(\text{NRUTM25.54})$$

(-0.6847) (13.4934)

$$+ 0.3148 * \text{LOG}(\text{RPW})$$

(1.0796)

$$\bar{R}^2 = 0.691$$

$$\text{SEE} = 0.0831$$

$$\text{DW} = 1.531$$

Mean of DV = 1.2090

Sample Period: 1954 to 1976

Equation is solved for NRUTF55.64 for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$

47. Unemployment Rate, Female, Ages 65 and Over (Percent)

$$\text{LOG}(\text{NRUTF65+}) = -5.1381 + 0.4239 * \text{LOG}(\text{NRUTM25.54})$$

(-2.900)      (5.1312)

$$+ 1.5915 * \text{LOG}(\text{RPW})$$

(3.2840)

$$\bar{R}^2 = 0.608$$

$$\text{SEE} = 0.1380$$

$$\text{DW} = 1.269$$

$$\text{Mean of DV} = 1.1607$$

Sample Period: 1954 to 1976

Equation is solved for NRUTF65+ for forecasting

$$\text{RPW} = .667 * \text{RP} + .333 * \text{RP}(-1)$$

$$\text{RP} = 100. * (\text{NPCN16.19} + \text{NPCN20.24} + \text{NPCN25.34}) / \text{NPCN16+}$$



48. Labor Force By Age Group and By Sex (Millions)

$$NLC\& = NRLT\& * NPCN\&$$

Where  $\& = M16.19, M20.24, M25.34, M35.44, M45.54, M55.64,$   
 $M65+, F16.19, F20.24, F25.34, F35.44, F45.54,$   
 $F55.64, F65+$

$$NLC\& = NLCM\& + NLCF\&$$

Where  $\& = 16.19, 20.24, 25.34, 35.44, 45.54, 55.64, 65+$

$$NLCM16+ = NLCM16.19 + NLCM20.24 + NLCM25.34 + NLCM35.44 +$$
$$NLCM45.54 + NLCM55.64 + NLCM65+$$

$$NLCF16+ = NLCF16.19 + NLCF20.24 + NLCF25.34 + NLCF35.44 +$$
$$NLCF45.54 + NLCF55.64 + NLCF65+$$

49. Labor Force, Total Ages 16 and Over (Millions)

$$NLC = NLCM16+ + NLCF16+$$

50. Number of Unemployed By Age-Sex Group (Millions)

$$NUT& = NLC& * NRUT&$$

Where & = M16.19, M20.24, M25.34, M35.44, M45.54, M55.64, M65+

F16.19, F20.24, F25.34, F35.44, F45.54, F55.64, F65+

51. Number of Unemployed by Age Group and By Sex (Millions)

$$NUT\& = NUTM\& + NUTF\&$$

Where  $\& = 16.19, 20.24, 25.34, 35.44, 45.54, 55.64, 65+$

$$NUTM16+ = NUTM16.19 + NUTM20.24 + NUTM25.34 + NUTM35.44 + \\ NUTM45.54 + NUTM55.64 + NUTM65+$$

$$NUTF16+ = NUTF16.19 + NUTF20.24 + NUTF25.34 + NUTF35.44 + \\ NUTF45.54 + NUTF55.64 + NUTF65+$$

52. Number of Unemployed (Millions)

$$NUT = NUTM16+ + NUTF16+$$

53. Labor Force Participation Rates, By Age and By Sex Group (Fractions)

$$NRLT\& = NLC\& / NPCN\&$$

Where & = M16+, F16+, 16.19, 20.24, 25.34, 35.44, 45.54, 55.64, 65+

54. Unemployment Rates by Age and Sex Group (Percent)

$$NRUT\& = 100. * NUT\& / NLC\&$$

Where & = M16+, F16+, 16.19, 20.24, 25.34, 35.44, 45.54, 55.64, 65+

55. Labor Force Participation Rate Total

$$NRLT = NLC / NPCN16+$$

56. Unemployment Rate, Total

$$NRUT = NUT / NLC$$

APPENDIX II

GLOSSARY OF MODEL VARIABLES  
FOR THE WHARTON ANNUAL MODEL

JANUARY, 1979



# THE WHARTON ANNUAL AND INDUSTRY MODEL

VARIABLE	NUMBER	TYPE	DESCRIPTION	UNITS	SOURCE
POPULATION	463	T	POPULATION, GROWTH RATE, TOTAL, SIXTEEN YEARS AND OVER	PERCENT	TRANSFORMATION
CAPITAL CONSUMPTION ADJUSTMENT, CORPORATE PROFITS AND IVA	667	F	CAPITAL CONSUMPTION ADJUSTMENT, CORPORATE PROFITS AND IVA	HILL CURRENT \$	SCH 1.13
CAPITAL CONSUMPTION ADJUSTMENT, PROPRIETORS' INCOME, NONFARM	668	F	CAPITAL CONSUMPTION ADJUSTMENT, PROPRIETORS' INCOME, NONFARM	HILL CURRENT \$	SCH 1.13
CAPITAL CONSUMPTION ADJUSTMENT, PROPRIETORS' INCOME, FARM	669	F	CAPITAL CONSUMPTION ADJUSTMENT, PROPRIETORS' INCOME, FARM	HILL CURRENT \$	SCH 1.13
CAPITAL CONSUMPTION ADJUSTMENT, PENTAL INCOME OF PERSONS	670	F	CAPITAL CONSUMPTION ADJUSTMENT, PENTAL INCOME OF PERSONS	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, FARM	417	F	DEPRECIATION RATE, FARM	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, COMMERCIAL & OTHER	418	F	DEPRECIATION RATE, COMMERCIAL & OTHER	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, LUMBER	419	F	DEPRECIATION RATE, LUMBER	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, FURNITURE	420	F	DEPRECIATION RATE, FURNITURE	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, STONE, CLAY & GLASS	399	F	DEPRECIATION RATE, STONE, CLAY & GLASS	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, PRIMARY METALS	394	F	DEPRECIATION RATE, PRIMARY METALS	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, FABRICATED METAL PRODUCTS	400	F	DEPRECIATION RATE, FABRICATED METAL PRODUCTS	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, NONELECTRICAL MACHINERY	396	F	DEPRECIATION RATE, NONELECTRICAL MACHINERY	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, ELECTRICAL MACHINERY	395	F	DEPRECIATION RATE, ELECTRICAL MACHINERY	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, MONAUTO TRANS EQUIP + ORDINANCE + MISC MFG	398	F	DEPRECIATION RATE, MONAUTO TRANS EQUIP + ORDINANCE + MISC MFG	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, MOTOR VEHICLES	397	F	DEPRECIATION RATE, MOTOR VEHICLES	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, INSTRUMENTS	403	F	DEPRECIATION RATE, INSTRUMENTS	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, FOOD & BEVERAGES	404	F	DEPRECIATION RATE, FOOD & BEVERAGES	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, TOBACCO	410	F	DEPRECIATION RATE, TOBACCO	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, TEXTILES	405	F	DEPRECIATION RATE, TEXTILES	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, APPAREL	411	F	DEPRECIATION RATE, APPAREL	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, PAPER	406	F	DEPRECIATION RATE, PAPER	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, PRINTING & PUBLISHING	413	F	DEPRECIATION RATE, PRINTING & PUBLISHING	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, CHEMICALS	407	F	DEPRECIATION RATE, CHEMICALS	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, PETROLEUM	408	F	DEPRECIATION RATE, PETROLEUM	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, RUBBER	409	F	DEPRECIATION RATE, RUBBER	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, LEATHER	412	F	DEPRECIATION RATE, LEATHER	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, MINTING	393	F	DEPRECIATION RATE, MINTING	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, COMMUNICATIONS	416	F	DEPRECIATION RATE, COMMUNICATIONS	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, TRANSPORTATION	414	F	DEPRECIATION RATE, TRANSPORTATION	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, UTILITIES	415	F	DEPRECIATION RATE, UTILITIES	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, RESIDENTIAL STRUCTURES, MORTGAGE HOMES	990	F	DEPRECIATION RATE, RESIDENTIAL STRUCTURES, MORTGAGE HOMES	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, RES STRUCTURES, MULTIPLE UNIT	976	F	DEPRECIATION RATE, RES STRUCTURES, MULTIPLE UNIT	PERCENT	WHARTON E.F.A.
DEPRECIATION RATE, RES STRUCTURES, SINGLE UNITS	969	F	DEPRECIATION RATE, RES STRUCTURES, SINGLE UNITS	PERCENT	WHARTON E.F.A.
CAPITAL CONSUMPTION ALLOWANCES WITH CAPITAL CONSUMPTION ADJ	408	T	CAPITAL CONSUMPTION ALLOWANCES WITH CAPITAL CONSUMPTION ADJ	PERCENT	TRANSFORMATION
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 AGRICULTURE, FORESTRY & FISH	233	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 AGRICULTURE, FORESTRY & FISH	HILL CURRENT \$	SCH 1.9
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 COMMERCIAL & OTHER	248	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 COMMERCIAL & OTHER	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 MANUFACTURING	407	T	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 MANUFACTURING	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 DURABLE	406	T	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 DURABLE	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 LUMBER & WOOD PROD	245	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 LUMBER & WOOD PROD	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 FUR, FURNITURE & FIXTURES	246	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 FUR, FURNITURE & FIXTURES	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 STONE, CLAY & GLASS	247	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 STONE, CLAY & GLASS	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 DUR, PRIMARY METALS	249	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 DUR, PRIMARY METALS	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 FABRICATED METALS	249	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 FABRICATED METALS	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 NONELECT MACHINERY	250	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 NONELECT MACHINERY	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 ELECTRIC MACHINERY	251	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 ELECTRIC MACHINERY	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 SIC 3721MACHINERY	250	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 SIC 3721MACHINERY	HILL CURRENT \$	BEA WORKFILE
CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 TRAUSS EQ-MOTOR VEH	252	R	CAP CONSUM ALLOW, TOTAL, W/O CCA ADJ1 TRAUSS EQ-MOTOR VEH	HILL CURRENT \$	BEA WORKFILE

[illegible]

# THE WHARTON ANNUAL AND INDUSTRY MODEL

VARIABLE	UNIT	DESCRIPTION	UNIT	SOURCE
CE35	649 T	PERSONAL CONSUMPTION EXPENDITURES, SERVICES	HILL CURRENT \$	SCH 1.1
CE36	645 H	PERSONAL CONSUMPTION EXPENDITURES, HOUSING	HILL CONSTANT \$	SCH 2.7 - L084
CE37	643 T	PERSONAL CONSUMPTION EXPENDITURES, HOUSING	HILL CURRENT \$	SCH 2.6 - L023
CE38	56 H	PERSONAL CONSUMPTION EXPENDITURES, OTHER	HILL CONSTANT \$	SCH 2.7 - L060
CE39	646 T	PERSONAL CONSUMPTION EXPENDITURES, OTHER	HILL CURRENT \$	SCH 2.5
CE40	1013 F	PERS CONS EXP, SVCS, FURN W/O PAY BY FIR INTER - USING AGG OFFL	HILL CONSTANT \$	TRANSFORMATION
CE41	56 R	PERSONAL CONSUMPTION EXPENDITURES, HOUSEHOLD OPERATION	HILL CONSTANT \$	SCH 2.7 - L043
CE42	644 T	PERSONAL CONSUMPTION EXPENDITURES, HOUSEHOLD OPERATION	HILL CURRENT \$	SCH 2.3
CE43	57 R	PERSONAL CONSUMPTION EXPENDITURES, TRANSPORTATION	HILL CONSTANT \$	SCH 2.7 - L050
CE44	645 T	PERSONAL CONSUMPTION EXPENDITURES, TRANSPORTATION	HILL CURRENT \$	SCH 2.3
CE45	641 T	CORPORATE PROFITS WITH INVENTORY VALUATION & CAPITAL CONS ADJ	HILL CURRENT \$	SCH 1.13
CE46	458 T	CORPORATE PROFITS AFTER TAX, TOTAL	HILL CURRENT \$	SCH 1.13
CE47	459 T	CORPORATE PROFITS BEFORE TAX, TOTAL	HILL CURRENT \$	SCH 1.13
CE48	1051 T	ALL CAPS DOM + FOR TOTAL SCRAPPAGE, YEAR END	MILLION VEHICLES	TRANSFORMATION
CE49	1056 T	EXPECTED SCRAPPAGE OF CAPS	MILLION VEHICLES	TRANSFORMATION
CE50	796 F	DUMMY, CANADIAN AMERICAN AUTO AGREEMENT	WHARTON F.F.A.	WHARTON F.F.A.
CE51	1045 F	DUMMY, AUTO STRIKE	WHARTON F.F.A.	WHARTON F.F.A.
CE52	673 F	DUMMY, 1970-1971 AUTO STRIKE	WHARTON F.F.A.	WHARTON F.F.A.
CE53	444 F	DUMMY, CAPITAL CONSUMPTION ALLOWANCES, 1962 TAX LAW CHANGE	WHARTON F.F.A.	WHARTON F.F.A.
CE54	420 F	DUMMY, DOCK STRIKES	WHARTON F.F.A.	WHARTON F.F.A.
CE55	425 F	DUMMY, CANADIAN EXPOSITION (1967 = 1.0 = 0 OTHERWISE)	WHARTON F.F.A.	WHARTON F.F.A.
CE56	519 F	DUMMY, CERTIFICATES OF DEPOSIT	WHARTON F.F.A.	WHARTON F.F.A.
CE57	520 F	DUMMY, FOR LIFTING OF REG ON ON CD'S	WHARTON F.F.A.	WHARTON F.F.A.
CE58	918 F	DUMMY, SHIFT IN INCL PROD, VALUE ADDED WEIGHT, 47-66=1.	WHARTON F.F.A.	WHARTON F.F.A.
CE59	919 F	DUMMY, SHIFT IN INCL PROD, VALUE ADDED WEIGHT, 67- =1.	WHARTON F.F.A.	WHARTON F.F.A.
CE60	675 F	DUMMY, USER COST, LONG AMENDMENT	WHARTON F.F.A.	WHARTON F.F.A.
CE61	419 F	DUMMY, PRODUCTIVITY	WHARTON F.F.A.	WHARTON F.F.A.
CE62	263 F	DUMMY, SECTOR PRICE, FURNITURE	WHARTON F.F.A.	WHARTON F.F.A.
CE63	260 F	DUMMY, SECTOR PRICE, FOOD & REVERAGES	WHARTON F.F.A.	WHARTON F.F.A.
CE64	261 F	DUMMY, SECTOR PRICE, TEXTILES	WHARTON F.F.A.	WHARTON F.F.A.
CE65	262 F	DUMMY, SECTOR PRICE, PAPER	WHARTON F.F.A.	WHARTON F.F.A.
CE66	971 T	DUMMY, FOR SPREAD BETWEEN LONG (FRMCS) & SHORT (FRMCP4M) RATES	WHARTON F.F.A.	WHARTON F.F.A.
CE67	672 F	DUMMY, STEEL STRIKE	WHARTON F.F.A.	WHARTON F.F.A.
CE68	423 F	DUMMY, WORK STOPPAGES, FURNITURE	WHARTON F.F.A.	WHARTON F.F.A.
CE69	422 F	DUMMY, WORK STOPPAGES, FURNITURE	WHARTON F.F.A.	WHARTON F.F.A.
CE70	420 F	DUMMY, WORK STOPPAGES, PAPER	WHARTON F.F.A.	WHARTON F.F.A.
CE71	424 F	DUMMY, WORK STOPPAGES, RUBBER	WHARTON F.F.A.	WHARTON F.F.A.
CE72	421 F	DUMMY, WORK STOPPAGES, WHEAT	WHARTON F.F.A.	WHARTON F.F.A.
CE73	126 F	TYPE TREN	WHARTON F.F.A.	WHARTON F.F.A.
CE74	776 F	DUMMY, FOR INTRODUCTION OF MEDICARE AND MEDICAID	WHARTON F.F.A.	WHARTON F.F.A.
CE75	473 F	DUMMY, FOR ELIMINATING THE EXCISE TAX ON AUTOS	WHARTON F.F.A.	WHARTON F.F.A.
CE76	472 F	DUMMY, FOR THE MAJOR CHANGES IN EXCISE TAX LAWS IN 1965	WHARTON F.F.A.	WHARTON F.F.A.
CE77	963 F	DUMMY, WITHHOLDING RATE EFFECT OF 1964 TAX LAW CHANGE	WHARTON F.F.A.	WHARTON F.F.A.
CE78	964 F	DUMMY, PERSONAL FEDERAL TAX SURCHARGE	WHARTON F.F.A.	WHARTON F.F.A.
CE79	965 F	DUMMY, OVER WITHHOLDING OF FEDERAL PERSONAL TAXES	WHARTON F.F.A.	WHARTON F.F.A.
CE80	966 F	DUMMY, ESTATE FROM OVER WITHHOLDING IN 1972	WHARTON F.F.A.	WHARTON F.F.A.
CE81	515 F	DUMMY, LIBERALIZATION TO STANDARD DEDUCTION FOR INDIVIDUAL TAXES	WHARTON F.F.A.	WHARTON F.F.A.
CE82	965 F	DUMMY, FOR THE ESTATE ALLOCATION	WHARTON F.F.A.	WHARTON F.F.A.



# THE SUMMARY OF MODEL VARIABLES FOR THE WHARTON ANNUAL AND INDUSTRY MODEL

VARIABLE	UNIT	DESCRIPTION	UNIT	SOURCE
INEXP70-71	510 F	DIVIDY FOR NEW LOW INCOME ALLOWANCE		WHARTON F.F.A.
INEXP71	510 F	DIVIDY, TRANSITION YEAR FOR LITERALIZED STANDARD DEDUCTION LAW		WHARTON F.F.A.
INEXP72	420 F	DIVIDY, WAR		WHARTON F.F.A.
INEXP73	165 F	DIVIDY, WAGE RATE, PRIMARY METALS		WHARTON F.F.A.
INEXP74	166 F	DIVIDY, WAGE RATE, TOBACCO		WHARTON F.F.A.
INEXP75	975 F	DIVIDY, SHIFT IN SHARE OF MULTI-UNIT HOUSING STARTS TO TOTAL		WHARTON F.F.A.
INEXP76	500 H	MONEY SUPPLY, CURRENCY COMPONENT (DECEMBER)		FRB A-12
INEXP77	507 H	COMMERCIAL BANKS, DEPOSITS, PRIVATE DEMAND (DECEMBER)		FRB A-12
INEXP78	509 F	COMMERCIAL BANKS, DEPOSITS, TIME AND SAVINGS (DECEMBER)		FRB A-12
INEXP79	521 T	MONEY SUPPLY, EXTENDED, INCLUDING TOTAL TIME DEPOSITS		TRANSFORMATION
INEXP80	516 F	FEE RESERVES, MEMBER BANKS		TRANSFORMATION
INEXP81	517 F	REQUIRED RESERVES		TRANSFORMATION
INEXP82	512 F	INTEREST RATE, EFFECTIVE, ON PASSBOOK SAVINGS AT COMMERCIAL BANK	%/ANNUM	FRB A-4
INEXP83	518 F	MAXIMUM RATE PAYABLE, \$100,000 & OVER NEGOTIABLE CO'S		FRB A-4
INEXP84	510 H	PRIME COMMERCIAL PAPER 4-6 MONTHS		FRB A-27
INEXP85	511 H	RAWD RATE, TOTAL		FRB A-24
INEXP86	515 H	RAWD RATE, RAIL		FRB A-24
INEXP87	517 F	DISCOUNT RATE, UTILITIES		FRB A-28
INEXP88	400 F	INTEREST RATE, 3-MONTH EURO-DOLLARS		FRB A-28
INEXP89	497 F	INTEREST RT, HOME MORTGAGE, AVG EFFECTIVE, FOR NEWLY BUILT HOMES		FRB A-28
INEXP90	523 F	EFFECTIVE RESERVE REQUIREMENT RATIO		FRB A-28
INEXP91	450 H	U.S. TRADE LIQUIDITY, EXTERNAL CLAIMS HELD BY U.S. ON FOREIGNERS		76 ERP TABLE B57
INEXP92	424 H	U.S. TRADE LIQUIDITY, EXTERNAL LIABILITIES HELD BY FOREIGN ON US		FRB H.9
INEXP93	127 T	GROSS NATIONAL PRODUCT		FRB H.9
INEXP94	570 T	GROSS NATIONAL PRODUCT		FRB H.9
INEXP95	1350 T	PER CAPITA REAL GROSS NATIONAL PRODUCT		FRB H.9
INEXP96	1300 T	REAL OUTPUT PER PERSON, ALL INDUSTRIES		FRB H.9
INEXP97	506 T	FEDERAL GOVT EXPENDITURES, TOTAL		FRB H.9
INEXP98	500 T	STATE AND LOCAL GOVERNMENT EXPENDITURES, TOTAL		FRB H.9
INEXP99	793 T	FED GOVT EXPEND, GRANTS-IN-AID TO STATE & LOCAL GOVERNMENTS		FRB H.9
INEXP100	505 T	GOVERNMENT PURCHASES OF GOODS AND SERVICES, FEDERAL		FRB H.9
INEXP101	505 T	FED GOVT EXPEND, PURCHASES OF GOODS & SERVICES, TOTAL		FRB H.9
INEXP102	505 T	GOVERNMENT PURCHASES OF GOODS & SERVICES, FEDERAL		FRB H.9
INEXP103	505 T	GOVERNMENT PURCHASES OF GOODS AND SERVICES, FEDERAL, DEFENSE		FRB H.9
INEXP104	505 T	FED GOVT EXPEND, PURCHASES OF GOODS & SERVICES, NAT'L DEFENSE		FRB H.9
INEXP105	505 T	GOVERNMENT PURCHASES OF GOODS AND SERVICES, FEDERAL, NONDEFENSE		FRB H.9
INEXP106	505 T	FED GOVT EXPEND, PURCHASES OF GOODS & SERVICES, NONDEFENSE		FRB H.9
INEXP107	505 T	GOVERNMENT PURCHASES OF GOODS AND SERVICES, STATE & LOCAL		FRB H.9
INEXP108	505 T	STATE AND LOCAL GOVERNMENT PURCHASES OF GOODS & SERVICES		FRB H.9
INEXP109	505 T	STATE AND LOCAL GOVERNMENT PURCHASES PER EMPLOYEE, ST & LOCAL		FRB H.9
INEXP110	505 T	STATE AND LOCAL GOVT EXPEND, PURCH, NON-DEFENSE, EDUCATION		FRB H.9
INEXP111	505 T	STATE AND LOCAL GOVT EXPEND, PURCH, NON-DEFENSE, EDUCATION		FRB H.9
INEXP112	505 T	STATE AND LOCAL GOVT EXPEND, PURCH, NON-DEFENSE, HEALTH, AMUSEMENT, LEISURE		FRB H.9
INEXP113	505 T	STATE AND LOCAL GOVT EXPEND, PURCH, NON-DEFENSE, HEALTH, AMUSEMENT, LEISURE		FRB H.9
INEXP114	505 T	STATE AND LOCAL GOVT EXPEND, PURCH, NON-DEFENSE, CIVILIAN SAFETY		FRB H.9

# THE CHARTER OF MODEL AND INDUSTRY MODEL

VARIABLE	NUMBER	TYPE	DESCRIPTION	UNITS	SOURCE
GOVEXP	612	I	STLOCAL GOVT EXPEND, PURCH, EQUI-DEFENSE, CIVILIAN SAFETY	BILL CURRENT \$	SCH 3,14
GOVEXP	93	F	STLOCAL GOVT EXPEND, PURCH, NON-DEFENSE, OTHER	BILL CURRENT \$	TRANSFORMATION
GOVEXP	613	I	STLOCAL GOVT EXPEND, PURCH, NON-DEFENSE, OTHER	BILL CURRENT \$	TRANSFORMATION
GOVEXP	650	I	GOVERNMENT PURCHASES OF GOODS AND SERVICES, TOTAL	BILL CURRENT \$	SCH 1,2
GOVEXP	614	I	GOVERNMENT PURCHASES OF GOODS AND SERVICES, TOTAL	BILL CURRENT \$	SCH 1,1
GOVEXP	541	I	FEDERAL GOVERNMENT RECEIPTS, TOTAL	BILL CURRENT \$	SCH 3,2
GOVEXP	544	I	STATE & LOCAL GOVERNMENT RECEIPTS, TOTAL	BILL CURRENT \$	SCH 3,4
GOVEXP	474	I	SURPLUS LESS CURRENT SURPLUS OF GOVERNMENT ENTERPRISES	BILL CURRENT \$	SCH 1,9
GOVEXP	479	F	FED GOVT EXPEND, SUBSIDIES LESS CURRENT SURPLUS GOVT ENTS	BILL CURRENT \$	SCH 3,2
GOVEXP	440	F	ST & LOCAL GOVT EXPEND, SUBSIDIES LESS CURRENT SURPLUS GOVT ENTS	BILL CURRENT \$	SCH 3,4
GOVEXP	547	I	FEDERAL GOVT, SURPLUS (+) OR DEFICIT (-), NIA BASIS	BILL CURRENT \$	SCH 3,2
GOVEXP	475	I	ST & LOCAL GOVT, SURPLUS (+) OR DEFICIT (-), NIA BASIS	BILL CURRENT \$	SCH 3,4
HOUSING	946	I	DISCARDS FROM STOCK, RES HOUSING UNITS, MOBILE HOMES	THOUSANDS	TRANSFORMATION
HOUSING	942	F	DISCARD RATE, HOUSING UNITS, MULTI-UNIT STRUCTURES	PERCENT	TRANSFORMATION
HOUSING	979	F	DISCARD RATE, HOUSING UNITS, SINGLE UNIT STRUCTURES	PERCENT	TRANSFORMATION
HOUSING	943	I	DISCARDS FROM STOCK, HOUSING UNITS, MULTI-UNIT STRUCTURES	THOUSANDS	TRANSFORMATION
HOUSING	940	I	DISCARDS FROM STOCK, HOUSING UNITS, SINGLE UNIT STRUCTURES	THOUSANDS	TRANSFORMATION
HOUSING	932	H	RENTAL HOUSING UNITS, VACANT, AS % OF YEAR-ROUND UNITS ON MARKET	PERCENT	HOUSING REP H11
HOUSING	740	I	PRIVATE NEW HOUSING UNITS STARTED, FARM AND NONFARM, TOTAL	THOUSANDS	CENSUS REP C-20
HOUSING	742	E	PRIVATE NEW HOUSING UNITS STARTED, FARM	THOUSANDS	TRANSFORMATION
HOUSING	945	H	MOBILE HOMES, NEGAT SHIPMENTS TO DEALERS	THOUSANDS	CONSTRUCT REV B-7
HOUSING	741	I	NEW NON FARM PRIVATE HOUSING STARTS	THOUSANDS	TRANSFORMATION
HOUSING	779	H	PRIVATE NEW HOUSING UNITS STARTED, FARM AND NONFARM, MULT. UNITS	THOUSANDS	TRANSFORMATION
HOUSING	774	H	PRIVATE NEW HOUSING UNITS STARTED, FARM AND NONFARM, SINGLE UNIT	THOUSANDS	CENSUS REP C-20
HOUSING	940	F	NEW HOUSING UNITS STARTED, PUBLIC, MULTI-UNIT STRUCTURES	THOUSANDS	TRANSFORMATION
HOUSING	941	F	NEW HOUSING UNITS STARTED, PUBLIC, SINGLE UNIT STRUCTURES	THOUSANDS	CENSUS REP C-20
HOUSING	1436	I	INVESTMENT, NEW PLANT & EQUIPMENT, INCL FARM	BILL CURRENT \$	TRANSFORMATION
HOUSING	1434	I	INVESTMENT, NEW PLANT & EQUIPMENT, INCL FARM	BILL CURRENT \$	TRANSFORMATION
HOUSING	567	H	INVESTMENT, NONRESIDENTIAL, STRUCTURES & EQUIPMENT, FARM	BILL CURRENT \$	TRANSFORMATION
HOUSING	59	I	INVESTMENT, FIXED, TOTAL, FARM (RESIDENTIAL + NONRESIDENTIAL)	BILL CURRENT \$	TRANSFORMATION
HOUSING	564	I	INVESTMENT, NONRESIDENTIAL, STRUCTURES & EQUIPMENT, FARM	BILL CURRENT \$	TRANSFORMATION
HOUSING	1559	H	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), COMMERCIAL AND OTHER	BILL CURRENT \$	HFA-UNPUBLISHED
HOUSING	1437	I	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), COMMERCIAL AND OTHER	BILL CURRENT \$	TRANSFORMATION
HOUSING	569	I	INVESTMENT, COMMERCIAL & OTHER, INCL STAT DIFF OF NIA VS HFA-SFC	BILL CURRENT \$	HFA SFC SURVEY
HOUSING	602	I	INVESTMENT, COMMERCIAL & OTHER, INCL NONFARM RES & STAT DIFF	BILL CURRENT \$	TRANSFORMATION
HOUSING	570	I	INVESTMENT, COMMERCIAL & OTHER, INCL STAT DIFF OF NIA VS HFA-SFC	BILL CURRENT \$	TRANSFORMATION
HOUSING	1143	I	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), MANUFACTURING, TOTAL	BILL CURRENT \$	TRANSFORMATION
HOUSING	1141	I	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), MANUFACTURING, DURABLES	BILL CURRENT \$	HFA SFC SURVEY
HOUSING	1145	I	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), MANUFACTURING, DURABLES	BILL CURRENT \$	TRANSFORMATION
HOUSING	604	H	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), DURABLES	BILL CURRENT \$	HFA SFC SURVEY
HOUSING	543	I	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), DURABLES	BILL CURRENT \$	TRANSFORMATION
HOUSING	604	H	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), DURABLES	BILL CURRENT \$	HFA SFC SURVEY
HOUSING	540	I	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), DURABLES	BILL CURRENT \$	TRANSFORMATION
HOUSING	604	H	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), DURABLES	BILL CURRENT \$	HFA SFC SURVEY
HOUSING	541	I	INVESTMENT, NEW PLANT&EQUIP(RES-SEC), DURABLES	BILL CURRENT \$	TRANSFORMATION



# THE GLASSARY OF MODEL AND VARIATIES FOR CAPTION A MODEL AND INDUSTRY MODEL

Variable	Number	Type	Description	Units	Source
LAED033	61 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED034	576 T	Investment	MFG, DUR; PRIMARY METALS	HILL CURRENT \$	HEA SEC SURVEY
LAED035	67 M	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED036	542 T	Investment	MFG, DUR; FABRICATED METAL	HILL CURRENT \$	HEA SEC SURVEY
LAED037	63 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED038	574 T	Investment	MFG, DUR; NONFLEC MACHINE	HILL CURRENT \$	HEA SEC SURVEY
LAED039	62 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED040	577 T	Investment	MFG, DUR; FLEC MACHINERY	HILL CURRENT \$	HEA SEC SURVEY
LAED041	65 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED042	580 T	Investment	MFG, DUR; SIC'S 372, 9+19+19	HILL CURRENT \$	TRANSFORMATION
LAED043	64 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED044	579 T	Investment	MFG, DUR; TRANS EQ, MOTOR VEH	HILL CURRENT \$	HEA SEC SURVEY
LAED045	70 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED046	545 T	Investment	MFG, DUR; INSTRUMENTS&PROD	HILL CURRENT \$	HEA SEC SURVEY
LAED047	1180 T	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED048	1182 T	Investment	MFG, DUR; MANUFACTURING, NONDURABLES	HILL CURRENT \$	HEA SEC SURVEY
LAED049	71 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED050	586 T	Investment	MFG, DUR; FOOD&BEVERAGE	HILL CURRENT \$	HEA SEC SURVEY
LAED051	77 F	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED052	592 T	Investment	MFG, DUR; TOBACCO MFG	HILL CURRENT \$	HEA SEC SURVEY
LAED053	72 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED054	547 T	Investment	MFG, DUR; TEXTILE MILL	HILL CURRENT \$	HEA SEC SURVEY
LAED055	74 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED056	593 T	Investment	MFG, DUR; APPAREL&PROD	HILL CURRENT \$	HEA SEC SURVEY
LAED057	73 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED058	60 R	Investment	MFG, DUR; APPAREL&PROD	HILL CURRENT \$	HEA SEC SURVEY
LAED059	595 T	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED060	74 R	Investment	MFG, DUR; PRINTING&PROD	HILL CURRENT \$	HEA SEC SURVEY
LAED061	596 T	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED062	75 R	Investment	MFG, DUR; CHEMICALS	HILL CURRENT \$	HEA SEC SURVEY
LAED063	597 T	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED064	76 R	Investment	MFG, DUR; PETROLEUM&COAL	HILL CURRENT \$	HEA SEC SURVEY
LAED065	598 T	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED066	77 R	Investment	MFG, DUR; RUBBER&PLASTIC	HILL CURRENT \$	HEA SEC SURVEY
LAED067	599 T	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED068	78 R	Investment	MFG, DUR; LEATHER&PROD	HILL CURRENT \$	HEA SEC SURVEY
LAED069	60 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED070	595 T	Investment	MFG, DUR; COMMUNICATIONS	HILL CURRENT \$	HEA SEC SURVEY
LAED071	65 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED072	596 T	Investment	MFG, DUR; TRANSPORTATION	HILL CURRENT \$	HEA SEC SURVEY
LAED073	62 R	Investment	NEW PLANT&EQUIP(CHEA-SEC)	HILL CONSTANT \$	TRANSFORMATION
LAED074	597 T	Investment	MFG, DUR; PUBLIC UTILITY	HILL CURRENT \$	HEA SEC SURVEY
LAED075	1300 R	Investment	UNIDENTIFIED CONCEPTUAL DIFFERENTIAL	HILL CONSTANT \$	TRANSFORMATION
LAED076	1053 T	Investment	UNIDENTIFIED CONCEPTUAL DIFFERENTIAL	HILL CURRENT \$	SCH 1.2
LAED077	651 T	Investment	FIXED	HILL CONSTANT \$	SCH 1.2
LAED078	664 T	Investment	FIXED	HILL CURRENT \$	SCH 1.1

# THE COMPARTMENT ANNUAL AND INDUSTRY CODE

VARIABLE	NUMBER TYPE	DESCRIPTION	UNITS	SOURCE
IREA	662 F	INVESTMENT, FIXED, NONRESIDENTIAL	HILL CONSTANT \$	SCH 1.2
IREB	605 T	INVESTMENT, FIXED, NONRESIDENTIAL	HILL CURRENT \$	SCH 1.1
IREC	601 T	INVESTMENT, FIXED, RESIDENTIAL	HILL CONSTANT \$	SCH 1.2
IREF	603 T	INVESTMENT, FIXED, RESIDENTIAL	HILL CURRENT \$	SCH 1.1
IREG	700 F	INVESTMENT, FIXED, RESIDENTIAL, PRODUCERS' DURABLE EQUIPMENT	HILL CURRENT \$	SCH 1.2
IREH	671 T	INVESTMENT, FIXED, RESIDENTIAL, PRODUCERS' DURABLE EQUIPMENT	HILL CURRENT \$	SCH 1.1
IREI	571 F	INVESTMENT, FIXED, RESIDENTIAL, FARM STRUCTURES	HILL CONSTANT \$	SCH 1.2
IREJ	572 T	INVESTMENT, FIXED, RESIDENTIAL, FARM STRUCTURES	HILL CURRENT \$	SCH 1.1
IREK	600 T	INVESTMENT, FIXED, RESIDENTIAL, NONFARM STRUCTURES	HILL CONSTANT \$	SCH 1.2
IREL	601 T	INVESTMENT, FIXED, RESIDENTIAL, NONFARM STRUCTURES	HILL CURRENT \$	SCH 1.1
IREM	705 H	CONCEPTUAL DIFF. NIA RES INVESTMENT VS. VALUE PUT IN PLACE	HILL CONSTANT \$	SCH 1.2
IRF	706 F	CHANGE IN BUSINESS INVENTORIES, FARM	HILL CONSTANT \$	SCH 1.2
IRG	707 T	CHANGE IN BUSINESS INVENTORIES, NONFARM	HILL CONSTANT \$	SCH 1.2
IRH	777 T	CHANGE IN BUSINESS INVENTORIES, NONFARM, MANUFACTURING	HILL CONSTANT \$	SCH 1.2
IRI	481 R	CHANGE IN BUSINESS INVENTORIES, NONFARM, MANUFACTURING, DURABLES	HILL CONSTANT \$	SCH 1.2
IRJ	45 T	CHANGE IN BUSINESS INVENTORIES, TOTAL	HILL CONSTANT \$	SCH 1.2
IRK	606 R	CHANGE IN BUSINESS INVENTORIES, TOTAL	HILL CURRENT \$	SCH 1.1
IRL	786 T	CHANGE IN INVENTORIES OF DEALERS' NEW AND USED AUTOS	HILL CONSTANT \$	SCH 1.2
IRM	789 T	INVESTMENT, GROSS PRIVATE DOMESTIC	HILL CURRENT \$	SCH 1.1
IRN	607 T	INVESTMENT, GROSS PRIVATE DOMESTIC	HILL CURRENT \$	SCH 1.1
IRO	920 R	FPR INDUSTRIAL PRODUCTION INDEX, TOTAL	1967 = 100.	FPR 6.12.3
IRP	921 R	FPR INDUSTRIAL PRODUCTION INDEX, MANUFACTURING	1967 = 100.	FPR 6.12.3
IRQ	923 R	FPR INDUSTRIAL PRODUCTION INDEX, MANUFACTURING, DURABLES	1967 = 100.	FPR 6.12.3
IRR	924 H	FPR INDUSTRIAL PRODUCTION INDEX, MANUFACTURING, NONDURABLES	1967 = 100.	FPR 6.12.3
IRS	925 R	FPR INDUSTRIAL PRODUCTION INDEX, MINING	1967 = 100.	FPR 6.12.3
IRT	926 R	FPR INDUSTRIAL PRODUCTION INDEX, MINING AND UTILITIES	1967 = 100.	FPR 6.12.3
IRU	926 H	FPR INDUSTRIAL PRODUCTION INDEX, UTILITIES	1967 = 100.	FPR 6.12.3
IRV	700 F	INVESTMENT TAX CREDIT RATE, FARM	PERCENT	TRANSFORMATION
IRW	1058 F	INVESTMENT TAX CREDIT RATE, COMMERCIAL + OTHER	PERCENT	TRANSFORMATION
IRX	604 F	INVESTMENT TAX CREDIT RATE, LUMBER	PERCENT	TRANSFORMATION
IRY	605 F	INVESTMENT TAX CREDIT RATE, FURNITURE	PERCENT	TRANSFORMATION
IRZ	602 F	INVESTMENT TAX CREDIT RATE, STONE, CLAY + GLASS	PERCENT	TRANSFORMATION
IRA	677 F	INVESTMENT TAX CREDIT RATE, PRIMARY METALS	PERCENT	TRANSFORMATION
IRB	603 F	INVESTMENT TAX CREDIT RATE, FABRICATED METAL PRODUCTS	PERCENT	TRANSFORMATION
IRC	679 F	INVESTMENT TAX CREDIT RATE, NON-ELECTRICAL MACHINERY	PERCENT	TRANSFORMATION
IRD	678 F	INVESTMENT TAX CREDIT RATE, ELECTRICAL MACHINERY	PERCENT	TRANSFORMATION
IRE	681 F	INVESTMENT TAX CREDIT RATE, NON-AUTO TRANS EQUIP + MKD + MISC MFG	PERCENT	TRANSFORMATION
IRF	680 F	INVESTMENT TAX CREDIT RATE, MOTOR VEHICLES	PERCENT	TRANSFORMATION
IRG	686 F	INVESTMENT TAX CREDIT RATE, INSTRUMENTS	PERCENT	TRANSFORMATION
IRH	687 F	INVESTMENT TAX CREDIT RATE, FOOD + BEVERAGES	PERCENT	TRANSFORMATION
IRI	693 F	INVESTMENT TAX CREDIT RATE, TOBACCO	PERCENT	TRANSFORMATION
IRJ	694 F	INVESTMENT TAX CREDIT RATE, TEXTILES	PERCENT	TRANSFORMATION
IRK	695 F	INVESTMENT TAX CREDIT RATE, APPAREL	PERCENT	TRANSFORMATION
IRL	696 F	INVESTMENT TAX CREDIT RATE, PAPER	PERCENT	TRANSFORMATION
IRM	697 F	INVESTMENT TAX CREDIT RATE, PETROLEUM + FUEL BURNING	PERCENT	TRANSFORMATION
IRN	698 F	INVESTMENT TAX CREDIT RATE, CHEMICALS	PERCENT	TRANSFORMATION
IRO	699 F	INVESTMENT TAX CREDIT RATE, PETROLEUM	PERCENT	TRANSFORMATION
IRP	699 F	INVESTMENT TAX CREDIT RATE, RUBBER	PERCENT	TRANSFORMATION

# THE GLOSSARY OF MODEL VARIABLES FOR THE TRANSPORTATION AND INDUSTRIAL MODEL

VARIABLE	UNIT TYPE	DESCRIPTION	UNITS	SOURCE
ITAVEF01	695 F	INVESTMENT TAX CREDIT RATE, LEATHER	PERCENT	TRANSFORMATION
ITAVEF02	676 F	INVESTMENT TAX CREDIT RATE, MINING	PERCENT	TRANSFORMATION
ITAVEF03	699 F	INVESTMENT TAX CREDIT RATE, COMMUNICATIONS	PERCENT	TRANSFORMATION
ITAVEF04	697 F	INVESTMENT TAX CREDIT RATE, TRANSPORTATION	PERCENT	TRANSFORMATION
ITAVEF05	698 F	INVESTMENT TAX CREDIT RATE, UTILITIES	PERCENT	TRANSFORMATION
ITAVEF06	452 H	INVENTORY VALUATION ADJUSTMENT, CORPORATE PROFITS	BILL CURRENT \$	SCH 1, 13
ITAVEF07	456 H	INVENTORY VALUATION ADJUSTMENT, NONFARM PRODUCTIONS	BILL CURRENT \$	SCH 1, 13
KCE001	1018 T	STOCK, CONSUMER DURABLES	BILL CURRENT \$	TRANSFORMATION
KCE002	1019 T	STOCK, CONSUMER DURABLES	BILL CURRENT \$	TRANSFORMATION
KCE003	670 T	STOCK, AUTOS AND PARTS	BILL CONSTANT \$	TRANSFORMATION
KCE004	1000 T	STOCK, RESIDENTIAL HOUSING UNITS, TOTAL, INCL. MOBILE HOMES	THOUSANDS	TRANSFORMATION
KCE005	977 H	STOCK, RESIDENTIAL HOUSING UNITS, MULTI-UNIT STRUCTURES	THOUSANDS	TRANSFORMATION
KCE006	999 T	STOCK, RESIDENTIAL HOUSING UNITS, MOBILE HOMES	THOUSANDS	TRANSFORMATION
KCE007	970 H	STOCK, RESIDENTIAL HOUSING UNITS, ONE-UNIT STRUCTURES	THOUSANDS	TRANSFORMATION
KCE008	998 H	PERCENT OF OWNER OCCUPIED DWELLINGS TO TOTAL HOUSING STOCK	PERCENT	TRANSFORMATION
KCE009	998 H	PERCENT OF SINGLE UNIT DWELLINGS TO TOTAL OWNER OCC. HOUSING STOCK	PERCENT	TRANSFORMATION
KCE010	1342 T	CAPITAL STOCK, FARM	BILL CONSTANT \$	TRANSFORMATION
KCE011	1342 T	CAPITAL STOCK, COMMERCIAL & OTHER	BILL CONSTANT \$	TRANSFORMATION
KCE012	392 T	CAPITAL STOCK, FURNITURE	BILL CONSTANT \$	TRANSFORMATION
KCE013	375 T	CAPITAL STOCK, LUMBER	BILL CONSTANT \$	TRANSFORMATION
KCE014	376 T	CAPITAL STOCK, LUMBER	BILL CONSTANT \$	TRANSFORMATION
KCE015	373 T	CAPITAL STOCK, STONE, CLAY & GLASS	BILL CONSTANT \$	TRANSFORMATION
KCE016	368 T	CAPITAL STOCK, MANUFACTURING, DURABLE, PRIMARY METALS	BILL CONSTANT \$	TRANSFORMATION
KCE017	370 T	CAPITAL STOCK, FABRICATED METAL PRODUCTS	BILL CONSTANT \$	TRANSFORMATION
KCE018	370 T	CAPITAL STOCK, NON-ELECTRICAL MACHINERY	BILL CONSTANT \$	TRANSFORMATION
KCE019	369 T	CAPITAL STOCK, ELECTRICAL MACHINERY	BILL CONSTANT \$	TRANSFORMATION
KCE020	372 T	CAPITAL STOCK, MFG. INP., NON-AUTO TRANS. EQUIPMENT	BILL CONSTANT \$	TRANSFORMATION
KCE021	371 T	CAPITAL STOCK, MOTOR VEHICLES	BILL CONSTANT \$	TRANSFORMATION
KCE022	377 T	CAPITAL STOCK, INSTRUMENTS	BILL CONSTANT \$	TRANSFORMATION
KCE023	378 T	CAPITAL STOCK, FOOD & BEVERAGES	BILL CONSTANT \$	TRANSFORMATION
KCE024	380 T	CAPITAL STOCK, TOBACCO	BILL CONSTANT \$	TRANSFORMATION
KCE025	379 T	CAPITAL STOCK, TEXTILES	BILL CONSTANT \$	TRANSFORMATION
KCE026	380 T	CAPITAL STOCK, APPAREL	BILL CONSTANT \$	TRANSFORMATION
KCE027	380 T	CAPITAL STOCK, PAPER	BILL CONSTANT \$	TRANSFORMATION
KCE028	387 T	CAPITAL STOCK, PRINTING & PUBLISHING	BILL CONSTANT \$	TRANSFORMATION
KCE029	381 T	CAPITAL STOCK, CHEMICALS	BILL CONSTANT \$	TRANSFORMATION
KCE030	382 T	CAPITAL STOCK, PETROLEUM	BILL CONSTANT \$	TRANSFORMATION
KCE031	383 T	CAPITAL STOCK, RUBBER	BILL CONSTANT \$	TRANSFORMATION
KCE032	386 T	CAPITAL STOCK, LEATHER	BILL CONSTANT \$	TRANSFORMATION
KCE033	387 T	CAPITAL STOCK, MINING	BILL CONSTANT \$	TRANSFORMATION
KCE034	390 T	CAPITAL STOCK, COMMUNICATIONS	BILL CONSTANT \$	TRANSFORMATION
KCE035	388 T	CAPITAL STOCK, TRANSPORTATION	BILL CONSTANT \$	TRANSFORMATION
KCE036	389 T	CAPITAL STOCK, UTILITIES	BILL CONSTANT \$	TRANSFORMATION
KCE037	603 T	STOCK, NONFARM RESIDENTIAL STRUCTURES	BILL CONSTANT \$	TRANSFORMATION
KCE038	621 T	INVENTORY STOCK, TOBACCO	BILL CONSTANT \$	SCH 5, 10
KCE039	450 H	INVENTORY STOCK, FURNACE, MANUFACTURING & FIRM-AUTO	BILL CONSTANT \$	SCH 5, 10
KCE040	455 T	INVENTORY STOCK, FURNACE, MANUFACTURING & FIRM-AUTO	BILL CONSTANT \$	TRANSFORMATION
KCE041	453 H	INVENTORY STOCK, COALFIRE, NEW AND USED AUTOS	BILL CONSTANT \$	TRANSFORMATION



# THE GLOSSARY OF MODEL VARIABLES FOR THE COMPARISON AND INDUSTRY MODEL

VARIABLE	UNIT	TYPE	DESCRIPTION	UNIT	SOURCE
ASACAPAY	1037 N		U.S. CAPS IN USE, TOTAL, YEAR END	MILL VEHICLES	TRANSFORMATION
WAGE	304 T		STOCK OF REAL HEALTH	MILL CONSTANT \$	TRANSFORMATION
WAGE	942 T		PERSONAL DISPOSABLE INCOME, NORMAL	MILL CONSTANT \$	TRANSFORMATION
WAGE	1020 T		STOCK OF PERSONAL SAVINGS	MILL CURRENT \$	TRANSFORMATION
WAGE	750 F		TAX LIFE, INVESTMENT, FARM	YEARS	TRANSFORMATION
WAGE	1440 F		TAX LIFE, INVESTMENT, COMMERCIAL & OTHER	YEARS	TRANSFORMATION
WAGE	730 F		TAX LIFE, INVESTMENT, LUMBER	YEARS	TRANSFORMATION
WAGE	735 F		TAX LIFE, INVESTMENT, FURNITURE	YEARS	TRANSFORMATION
WAGE	732 F		TAX LIFE, INVESTMENT, STONE, CLAY & GLASS	YEARS	TRANSFORMATION
WAGE	727 F		TAX LIFE, INVESTMENT, PRIMARY METALS	YEARS	TRANSFORMATION
WAGE	733 F		TAX LIFE, INVESTMENT, FABRICATED METAL PRODUCTS	YEARS	TRANSFORMATION
WAGE	729 F		TAX LIFE, INVESTMENT, NONELECTRICAL MACHINERY	YEARS	TRANSFORMATION
WAGE	728 F		TAX LIFE, INVESTMENT, ELECTRICAL MACHINERY	YEARS	TRANSFORMATION
WAGE	731 F		TAX LIFE, INVESTMENT, NONAUTO TRANS EQUIP + ORD + MISC MFG	YEARS	TRANSFORMATION
WAGE	730 F		TAX LIFE, INVESTMENT, MOTOR VEHICLES	YEARS	TRANSFORMATION
WAGE	736 F		TAX LIFE, INVESTMENT, INSTRUMENTS	YEARS	TRANSFORMATION
WAGE	737 F		TAX LIFE, INVESTMENT, FOOD & BEVERAGES	YEARS	TRANSFORMATION
WAGE	703 F		TAX LIFE, INVESTMENT, TOBACCO	YEARS	TRANSFORMATION
WAGE	738 F		TAX LIFE, INVESTMENT, TEXTILES	YEARS	TRANSFORMATION
WAGE	704 F		TAX LIFE, INVESTMENT, APPAREL	YEARS	TRANSFORMATION
WAGE	739 F		TAX LIFE, INVESTMENT, PAPER	YEARS	TRANSFORMATION
WAGE	746 F		TAX LIFE, INVESTMENT, PRINTING & PUBLISHING	YEARS	TRANSFORMATION
WAGE	740 F		TAX LIFE, INVESTMENT, CHEMICALS	YEARS	TRANSFORMATION
WAGE	741 F		TAX LIFE, INVESTMENT, PETROLEUM	YEARS	TRANSFORMATION
WAGE	742 F		TAX LIFE, INVESTMENT, RUBBER	YEARS	TRANSFORMATION
WAGE	745 F		TAX LIFE, INVESTMENT, LEATHER	YEARS	TRANSFORMATION
WAGE	726 F		TAX LIFE, INVESTMENT, MINING	YEARS	TRANSFORMATION
WAGE	749 F		TAX LIFE, INVESTMENT, COMMUNICATIONS	YEARS	TRANSFORMATION
WAGE	747 F		TAX LIFE, INVESTMENT, TRANSPORTATION	YEARS	TRANSFORMATION
WAGE	748 F		TAX LIFE, INVESTMENT, UTILITIES	YEARS	TRANSFORMATION
WAGE	1168 T		AVG. MILES PER GALLON, CITY & HWY DRVG, NEW CARS	MPG	TRANSFORMATION
WAGE	1004 T		AVG. MILES PER GALLON, ALL CARS	MILES/GALLON	TRANSFORMATION
WAGE	1186 F		ALL CARS TOTAL	MILES PER GAL	TRANSFORMATION
WAGE	1187 F		ALL CARS TOTAL	MILES PER GAL	TRANSFORMATION
WAGE	1169 F		ADJ. MILES DRIVEN BY A CAR	THOUSANDS	TRANSFORMATION
WAGE	1526 F		REAL EFFECTIVE MILEAGE RATE	\$ PER HOUR	TRANSFORMATION
WAGE	1065 T		AVG. AGE OF THE STOCK OF CARS	YEARS	TRANSFORMATION
WAGE	952 F		NUMBER OF U.S. HOUSEHOLDS, CENSUS DEFINITION	MILLIONS	CUR POP REP P-20
WAGE	967 F		NUMBER OF U.S. HOUSEHOLDS, CENSUS DEFINITION	PERCENT	CUR POP REP P-20
WAGE	905 N		UNEMPLOYMENT RATE, RESIDENTIAL HOUSING UNITS, FIVE MONTHS	THOUSANDS	CUR POP REP P-20
WAGE	953 F		UNEMPLOYMENT RATE, RESIDENTIAL HOUSING UNITS, FIVE MONTHS	THOUSANDS	EMPLOYE ARN-U.S.
WAGE	1501 N		UNEMPLOYMENT RATE, RESIDENTIAL HOUSING UNITS, FIVE MONTHS	THOUSANDS	TRANSFORMATION
WAGE	1301 T		UNEMPLOYMENT RATE, RESIDENTIAL HOUSING UNITS, FIVE MONTHS	THOUSANDS	TRANSFORMATION
WAGE	224 T		UNEMPLOYMENT RATE, RESIDENTIAL HOUSING UNITS, FIVE MONTHS	THOUSANDS	TRANSFORMATION
WAGE	1500 T		UNEMPLOYMENT RATE, RESIDENTIAL HOUSING UNITS, FIVE MONTHS	THOUSANDS	TRANSFORMATION
WAGE	436 T		UNEMPLOYMENT RATE, RESIDENTIAL HOUSING UNITS, FIVE MONTHS	THOUSANDS	TRANSFORMATION
WAGE	229 N		UNEMPLOYMENT RATE, RESIDENTIAL HOUSING UNITS, FIVE MONTHS	THOUSANDS	TRANSFORMATION
WAGE	225 N		UNEMPLOYMENT RATE, RESIDENTIAL HOUSING UNITS, FIVE MONTHS	THOUSANDS	TRANSFORMATION

# THE GLOSSARY OF MODEL ANNUAL AND INDUSTRY MODEL OF THE COMPARISON OF MODEL ANNUAL AND INDUSTRY MODEL

VARIABLE	NUMBER	TYPE	DESCRIPTION	UNITS	SOURCE
NETTME	435	T	EMPLOYEES IN AGRICULTURAL PAYROLLS, MANUFACTURING	THOUSANDS	EMPLOYEARN-U.S.
NETTME10	435	T	EMPLOYEES IN AGRICULTURAL PAYROLLS, MANUFACTURING, DURABLES	THOUSANDS	EMPLOYEARN-U.S.
NETTME11	435	T	EMPLOYEES IN AGRICULTURAL PAYROLLS, MANUFACTURING, ACCESSORIES	THOUSANDS	EMPLOYEARN-U.S.
NETTME20	332	R	EMPLOYEES IN LUMBER & WOOD PRODUCTS	THOUSANDS	EMPLOYEARN-U.S.
NETTME25	333	R	EMPLOYEES IN FURNITURE AND FIXTURES	THOUSANDS	EMPLOYEARN-U.S.
NETTME32	333	R	EMPLOYEES IN STONE, CLAY & GLASS PROD	THOUSANDS	EMPLOYEARN-U.S.
NETTME33	326	R	EMPLOYEES IN PRIMARY METAL INDUSTRIES	THOUSANDS	EMPLOYEARN-U.S.
NETTME34	331	R	EMPLOYEES IN FABRICATED METAL PRODUCTS	THOUSANDS	EMPLOYEARN-U.S.
NETTME35	328	R	EMPLOYEES IN MACHINERY, EXC ELECTRICAL	THOUSANDS	EMPLOYEARN-U.S.
NETTME36	327	R	EMPLOYEES IN ELECTRICAL EQUIP&SUPPLIES	THOUSANDS	EMPLOYEARN-U.S.
NETTME37SP1	1443	R	EMPLOYEES IN AIRCRAFT, ORDINANCE OTHER TRAN EQUIP	THOUSANDS	TRANSFORMATION
NETTME37SP2	335	R	EMPLOYEES IN AUTO TRANS EQUIP	THOUSANDS	TRANSFORMATION
NETTME371	329	R	EMPLOYEES IN TRAN EQUIP, MOTOR VEH & EQUIP	THOUSANDS	TRANSFORMATION
NETTME38	1451	R	EMPLOYEES IN AIRCRAFT & OTHER TRAN EQUIP	THOUSANDS	TRANSFORMATION
NETTME39	334	R	EMPLOYEES IN INSTRUMENTS RELATED PROD	THOUSANDS	EMPLOYEARN-U.S.
NETTME40	1442	R	EMPLOYEES IN MISCELLANEOUS MANUFACTURE	THOUSANDS	EMPLOYEARN-U.S.
NETTME41	336	R	EMPLOYEES IN MANUFACTURING, NONDURABLE	THOUSANDS	EMPLOYEARN-U.S.
NETTME42	342	R	EMPLOYEES IN FOOD & KINDRED PROD	THOUSANDS	EMPLOYEARN-U.S.
NETTME43	337	R	EMPLOYEES IN TOBACCO MANUFACTURES	THOUSANDS	EMPLOYEARN-U.S.
NETTME44	343	R	EMPLOYEES IN TEXTILE MILL PRODUCTS	THOUSANDS	EMPLOYEARN-U.S.
NETTME45	338	R	EMPLOYEES IN APPAREL & OTHER TEX PROD	THOUSANDS	EMPLOYEARN-U.S.
NETTME46	340	R	EMPLOYEES IN PAPER & ALLIED PRODUCT	THOUSANDS	EMPLOYEARN-U.S.
NETTME47	345	R	EMPLOYEES IN PRINTING & PUBLISHING	THOUSANDS	EMPLOYEARN-U.S.
NETTME48	339	R	EMPLOYEES IN CHEMICALS & PRODUCTS	THOUSANDS	EMPLOYEARN-U.S.
NETTME49	340	R	EMPLOYEES IN PETROLEUM & COAL PROD	THOUSANDS	EMPLOYEARN-U.S.
NETTME50	341	R	EMPLOYEES IN RUBBER & PLASTICS, NEC	THOUSANDS	EMPLOYEARN-U.S.
NETTME51	344	R	EMPLOYEES IN LEATHER & LEATHER PROD	THOUSANDS	EMPLOYEARN-U.S.
NETTME52	325	R	EMPLOYEES IN MINING	THOUSANDS	EMPLOYEARN-U.S.
NETTME53	1332	T	EMPLOYEES IN AGRICULTURAL PAYROLLS, ALL PVT SECTOR	THOUSANDS	EMPLOYEARN-U.S.
NETTME54	437	T	EMPLOYEES IN AGRICULTURAL PAYROLLS, REGULATED, COMMUNICATIONS	THOUSANDS	EMPLOYEARN-U.S.
NETTME55	226	R	EMPLOYEES IN AGRICULTURAL PAYROLLS, REGULATED, TRANSPORTATION	THOUSANDS	EMPLOYEARN-U.S.
NETTME56	225	R	EMPLOYEES IN AGRICULTURAL PAYROLLS, REGULATED, ELFC, GAS & SANITARY SVC	THOUSANDS	EMPLOYEARN-U.S.
NETTME57	227	R	EMPLOYEES IN AGRICULTURAL PAYROLLS, SERVICE INDUSTRIES	THOUSANDS	EMPLOYEARN-U.S.
NETTME58	1345	R	EMPLOYEES IN AGRICULTURAL PAYROLLS, WHOLESALE AND RETAIL TRADE	THOUSANDS	EMPLOYEARN-U.S.
NETTME59	1346	R	EMPLOYEES IN AGRICULTURAL PAYROLLS, AGRI CULTURE, AGES 16 YRS & OVER	THOUSANDS	EMPLOYEARN-U.S.
NETTME60	220	R	CIVILIAN LABOR FORCE, EMPLOYED, FEMALES, 16 - 19 YEARS OLD	MILLIONS	TRANSFORMATION
NETTME61	1357	T	CIVILIAN LABOR FORCE, EMPLOYED, FEMALES, 16 YRS & OVER	MILLIONS	TRANSFORMATION
NETTME62	1372	T	CIVILIAN LABOR FORCE, EMPLOYED, FEMALES, 20 - 24 YEARS OLD	MILLIONS	TRANSFORMATION
NETTME63	1359	T	CIVILIAN LABOR FORCE, EMPLOYED, FEMALES, 25 - 34 YEARS OLD	MILLIONS	TRANSFORMATION
NETTME64	1360	T	CIVILIAN LABOR FORCE, EMPLOYED, FEMALES, 35 - 44 YEARS OLD	MILLIONS	TRANSFORMATION
NETTME65	1361	T	CIVILIAN LABOR FORCE, EMPLOYED, FEMALES, 45 - 54 YEARS OLD	MILLIONS	TRANSFORMATION
NETTME66	1362	T	CIVILIAN LABOR FORCE, EMPLOYED, FEMALES, 55 - 64 YEARS OLD	MILLIONS	TRANSFORMATION
NETTME67	1363	T	CIVILIAN LABOR FORCE, EMPLOYED, FEMALES, 65 YEARS & OLDER	MILLIONS	TRANSFORMATION
NETTME68	1364	T	CIVILIAN LABOR FORCE, EMPLOYED, MALES, 16 - 19 YEARS OLD	MILLIONS	TRANSFORMATION
NETTME69	1371	T	CIVILIAN LABOR FORCE, EMPLOYED, MALES, 16 YRS & OVER	MILLIONS	TRANSFORMATION
NETTME70	1351	T	CIVILIAN LABOR FORCE, EMPLOYED, MALES, 20 - 24 YEARS OLD	MILLIONS	TRANSFORMATION
NETTME71	1352	T	CIVILIAN LABOR FORCE, EMPLOYED, MALES, 25 - 34 YEARS OLD	MILLIONS	TRANSFORMATION



[illegible]

# THE GLOSSARY OF MODEL VARIABLES FOR THE HARTMAN ANNUAL AND INDUSTRY MODEL

VARIABLE	NUMBER	TYPE	DESCRIPTION	UNITS	SOURCE
HC55.44	127 R	CIV LABOR FORCE, FEMALES, 55-64		MILLIONS	HLS
HC55.44	128 R	CIV LABOR FORCE, FEMALES, 65 & OVER		MILLIONS	HLS
HC55.44	135 I	DIFFERENCE BETWEEN HLC & SUM OF SURGROUPS		MILLIONS	TRANSFORMATION
HC55.44	137 I	DIFFERENCE BETWEEN HLCMA+ & SUM OF SURGROUPS		MILLIONS	TRANSFORMATION
HC55.44	144 I	CIV LABOR FORCE, MALES, SUM OF SURGROUPS		MILLIONS	TRANSFORMATION
HC55.44	145 R	CIV LABOR FORCE, MALES, 16-19		MILLIONS	HLS
HC55.44	146 R	CIV LABOR FORCE, MALES, 16 & OVER		MILLIONS	TRANSFORMATION
HC55.44	147 R	CIV LABOR FORCE, MALES, 20-24		MILLIONS	HLS
HC55.44	148 R	CIV LABOR FORCE, MALES, 25-34		MILLIONS	HLS
HC55.44	149 R	CIV LABOR FORCE, MALES, 35-44		MILLIONS	TRANSFORMATION
HC55.44	150 R	CIV LABOR FORCE, MALES, 45-54		MILLIONS	HLS
HC55.44	151 R	CIV LABOR FORCE, MALES, 55-64		MILLIONS	HLS
HC55.44	152 R	CIV LABOR FORCE, MALES, 65+		MILLIONS	HLS
HC55.44	153 R	CIV LABOR FORCE, SUM OF SURGROUPS		MILLIONS	TRANSFORMATION
HC55.44	154 R	CIV LABOR FORCE, BOTH SEXES, 16-19		MILLIONS	TRANSFORMATION
HC55.44	155 R	CIV LABOR FORCE, BOTH SEXES, 20-24		MILLIONS	TRANSFORMATION
HC55.44	156 R	CIV LABOR FORCE, BOTH SEXES, 25-34		MILLIONS	TRANSFORMATION
HC55.44	157 R	CIV LABOR FORCE, BOTH SEXES, 35-44		MILLIONS	TRANSFORMATION
HC55.44	158 R	CIV LABOR FORCE, BOTH SEXES, 45-54		MILLIONS	TRANSFORMATION
HC55.44	159 R	CIV LABOR FORCE, BOTH SEXES, 55-64		MILLIONS	TRANSFORMATION
HC55.44	160 R	CIV LABOR FORCE, BOTH SEXES, 65 YRS & OVER		MILLIONS	TRANSFORMATION
HC55.44	161 R	ARMED FORCES, INCLUDING OVERSEAS		MILLIONS	TRANSFORMATION
HC55.44	162 R	ARMED FORCES, SELECTIVE SERVICE INDUCTEES		MILLIONS	TRANSFORMATION
HC55.44	163 R	MILITARY POPULATION, MALES, 16-19		THOUSANDS	76 FRP TABLE B22
HC55.44	164 R	MANUFACTURING		MILLIONS	TRANSFORMATION
HC55.44	165 R	MANUFACTURING, DURABLES		MILLIONS/YEAR	TRANSFORMATION
HC55.44	166 R	MANUFACTURING, DURABLES LUMBER AND WOOD PRODUCTS		BILLIONS/YEAR	TRANSFORMATION
HC55.44	167 R	MANUFACTURING, DURABLES FURNITURE AND FIXTURES		BILLIONS/YEAR	TRANSFORMATION
HC55.44	168 R	MANUFACTURING, DURABLES STONE, CLAY AND GLASS PRODUCTS		BILLIONS/YEAR	TRANSFORMATION
HC55.44	169 R	MANUFACTURING, DURABLES PRIMARY METAL INDUSTRIES		BILLIONS/YEAR	TRANSFORMATION
HC55.44	170 R	MANUFACTURING, DURABLES FARM PRODUCTS		BILLIONS/YEAR	TRANSFORMATION
HC55.44	171 R	MANUFACTURING, DURABLES ELECTRICAL EQUIPMENT & SUPPLY		BILLIONS/YEAR	TRANSFORMATION
HC55.44	172 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	173 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	174 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	175 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	176 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	177 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	178 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	179 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	180 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	181 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	182 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	183 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	184 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	185 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	186 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	187 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	188 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	189 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	190 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	191 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	192 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	193 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	194 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	195 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	196 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	197 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	198 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	199 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION
HC55.44	200 R	MANUFACTURING, DURABLES TRANSPORT TO + ORDNANCE + MISC MFG		BILLIONS/YEAR	TRANSFORMATION

VARIABLE	NUMBER	TYPE	DESCRIPTION	UNIT	SOURCE
POPULATION	202 R		POPULATION	MILLIONS/YEAR	TRANSFORMATION
POPULATION	400 I		POPULATION	MILL CURRENT \$	SCH 1.9
POPULATION	1000 R		POPULATION	MILL VEHICLES	CUR POP REP P-25
POPULATION	427 I		POPULATION	PERCENT	TRANSFORMATION
POPULATION	470 I		POPULATION	MILLIONS	CUR POP REP P-25
POPULATION	429 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1236 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1209 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1422 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1237 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1423 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1424 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1230 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1425 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1426 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1259 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1427 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1428 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1240 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1429 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1430 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1241 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1431 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1432 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1242 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1433 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1408 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1229 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1240 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1409 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1230 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1410 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1411 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1231 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1412 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1413 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1232 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1414 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1415 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1233 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1416 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1417 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1234 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1418 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1235 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1419 I		POPULATION	MILLIONS	TRANSFORMATION
POPULATION	1202 I		POPULATION	MILLIONS	TRANSFORMATION



VARIABLE	NUMBER	TYPE	DESCRIPTION	UNIT	SOURCE
POP 16-19	1201	T	CIV POP IN INSTITUTIONAL POPULATION, AGES 16-19	MILLIONS	TRANSFORMATION
POP 16-19	1300	I	CIV POP IN INSTITUTIONAL POPULATION, AGES 20-24	MILLIONS	TRANSFORMATION
POP 20-24	1293	I	CIV POP IN INSTITUTIONAL POPULATION, AGES 25-34	MILLIONS	TRANSFORMATION
POP 25-34	1294	I	CIV POP IN INSTITUTIONAL POPULATION, AGES 35-44	MILLIONS	TRANSFORMATION
POP 35-44	1295	I	CIV POP IN INSTITUTIONAL POPULATION, AGES 45-54	MILLIONS	TRANSFORMATION
POP 45-54	1296	I	CIV POP IN INSTITUTIONAL POPULATION, AGES 55-64	MILLIONS	TRANSFORMATION
POP 55-64	1297	I	CIV POP IN INSTITUTIONAL POPULATION, AGES 65 & OVER	MILLIONS	TRANSFORMATION
POP 65+	1298	I	CIV POP IN INSTITUTIONAL POPULATION, TOTAL (AGES 16 AND OVER)	MILLIONS	TRANSFORMATION
POP 16-19	1301	F	BIRTH RATE BY AGE OF MOTHER, AGES 15 - 19	BIRTHS PER 1000	TRANSFORMATION
POP 16-19	1302	F	BIRTH RATE BY AGE OF MOTHER, AGES 20 - 24	BIRTHS PER 1000	TRANSFORMATION
POP 20-24	1303	F	BIRTH RATE BY AGE OF MOTHER, AGES 25 - 34	BIRTHS PER 1000	TRANSFORMATION
POP 25-34	1304	F	BIRTH RATE BY AGE OF MOTHER, AGES 35 - 44	BIRTHS PER 1000	TRANSFORMATION
POP 35-44	1305	F	BIRTH RATE BY AGE OF MOTHER, AGES 45 - 54	BIRTHS PER 1000	TRANSFORMATION
POP 45-54	1306	F	BIRTH RATE BY AGE OF MOTHER, AGES 55 - 64	BIRTHS PER 1000	TRANSFORMATION
POP 55-64	1307	F	BIRTH RATE BY AGE OF MOTHER, AGES 65 & OVER	BIRTHS PER 1000	TRANSFORMATION
POP 65+	1308	F	BIRTH RATE BY AGE OF MOTHER, TOTAL	BIRTHS PER 1000	TRANSFORMATION
POP 16-19	1309	F	SCHOOL ENROLLMENT, FEMALES, AGES 16-19	MILLIONS	TRANSFORMATION
POP 16-19	1310	F	SCHOOL ENROLLMENT, MALES, AGES 16-19	MILLIONS	TRANSFORMATION
POP 20-24	1311	F	SCHOOL ENROLLMENT, FEMALES, AGES 20-24	MILLIONS	TRANSFORMATION
POP 20-24	1312	F	SCHOOL ENROLLMENT, MALES, AGES 20-24	MILLIONS	TRANSFORMATION
POP 25-34	1313	F	SCHOOL ENROLLMENT, FEMALES, AGES 25-34	MILLIONS	TRANSFORMATION
POP 25-34	1314	F	SCHOOL ENROLLMENT, MALES, AGES 25-34	MILLIONS	TRANSFORMATION
POP 35-44	1315	F	SCHOOL ENROLLMENT, FEMALES, AGES 35-44	MILLIONS	TRANSFORMATION
POP 35-44	1316	F	SCHOOL ENROLLMENT, MALES, AGES 35-44	MILLIONS	TRANSFORMATION
POP 45-54	1317	F	SCHOOL ENROLLMENT, FEMALES, AGES 45-54	MILLIONS	TRANSFORMATION
POP 45-54	1318	F	SCHOOL ENROLLMENT, MALES, AGES 45-54	MILLIONS	TRANSFORMATION
POP 55-64	1319	F	SCHOOL ENROLLMENT, FEMALES, AGES 55-64	MILLIONS	TRANSFORMATION
POP 55-64	1320	F	SCHOOL ENROLLMENT, MALES, AGES 55-64	MILLIONS	TRANSFORMATION
POP 65+	1321	F	SCHOOL ENROLLMENT, FEMALES, AGES 65 & OVER	MILLIONS	TRANSFORMATION
POP 65+	1322	F	SCHOOL ENROLLMENT, MALES, AGES 65 & OVER	MILLIONS	TRANSFORMATION
POP 16-19	1323	F	SCHOOL ENROLLMENT, TOTAL (AGES 16-19)	MILLIONS	TRANSFORMATION
POP 20-24	1324	F	SCHOOL ENROLLMENT, TOTAL (AGES 20-24)	MILLIONS	TRANSFORMATION
POP 25-34	1325	F	SCHOOL ENROLLMENT, TOTAL (AGES 25-34)	MILLIONS	TRANSFORMATION
POP 35-44	1326	F	SCHOOL ENROLLMENT, TOTAL (AGES 35-44)	MILLIONS	TRANSFORMATION
POP 45-54	1327	F	SCHOOL ENROLLMENT, TOTAL (AGES 45-54)	MILLIONS	TRANSFORMATION
POP 55-64	1328	F	SCHOOL ENROLLMENT, TOTAL (AGES 55-64)	MILLIONS	TRANSFORMATION
POP 65+	1329	F	SCHOOL ENROLLMENT, TOTAL (AGES 65 & OVER)	MILLIONS	TRANSFORMATION
POP 16-19	1330	F	SCHOOL ENROLLMENT, TOTAL (AGES 16-19)	MILLIONS	TRANSFORMATION
POP 20-24	1331	F	SCHOOL ENROLLMENT, TOTAL (AGES 20-24)	MILLIONS	TRANSFORMATION
POP 25-34	1332	F	SCHOOL ENROLLMENT, TOTAL (AGES 25-34)	MILLIONS	TRANSFORMATION
POP 35-44	1333	F	SCHOOL ENROLLMENT, TOTAL (AGES 35-44)	MILLIONS	TRANSFORMATION
POP 45-54	1334	F	SCHOOL ENROLLMENT, TOTAL (AGES 45-54)	MILLIONS	TRANSFORMATION
POP 55-64	1335	F	SCHOOL ENROLLMENT, TOTAL (AGES 55-64)	MILLIONS	TRANSFORMATION
POP 65+	1336	F	SCHOOL ENROLLMENT, TOTAL (AGES 65 & OVER)	MILLIONS	TRANSFORMATION
POP 16-19	1337	F	SCHOOL ENROLLMENT, TOTAL (AGES 16-19)	MILLIONS	TRANSFORMATION
POP 20-24	1338	F	SCHOOL ENROLLMENT, TOTAL (AGES 20-24)	MILLIONS	TRANSFORMATION
POP 25-34	1339	F	SCHOOL ENROLLMENT, TOTAL (AGES 25-34)	MILLIONS	TRANSFORMATION
POP 35-44	1340	F	SCHOOL ENROLLMENT, TOTAL (AGES 35-44)	MILLIONS	TRANSFORMATION
POP 45-54	1341	F	SCHOOL ENROLLMENT, TOTAL (AGES 45-54)	MILLIONS	TRANSFORMATION
POP 55-64	1342	F	SCHOOL ENROLLMENT, TOTAL (AGES 55-64)	MILLIONS	TRANSFORMATION
POP 65+	1343	F	SCHOOL ENROLLMENT, TOTAL (AGES 65 & OVER)	MILLIONS	TRANSFORMATION
POP 16-19	1344	F	SCHOOL ENROLLMENT, TOTAL (AGES 16-19)	MILLIONS	TRANSFORMATION
POP 20-24	1345	F	SCHOOL ENROLLMENT, TOTAL (AGES 20-24)	MILLIONS	TRANSFORMATION
POP 25-34	1346	F	SCHOOL ENROLLMENT, TOTAL (AGES 25-34)	MILLIONS	TRANSFORMATION
POP 35-44	1347	F	SCHOOL ENROLLMENT, TOTAL (AGES 35-44)	MILLIONS	TRANSFORMATION
POP 45-54	1348	F	SCHOOL ENROLLMENT, TOTAL (AGES 45-54)	MILLIONS	TRANSFORMATION
POP 55-64	1349	F	SCHOOL ENROLLMENT, TOTAL (AGES 55-64)	MILLIONS	TRANSFORMATION
POP 65+	1350	F	SCHOOL ENROLLMENT, TOTAL (AGES 65 & OVER)	MILLIONS	TRANSFORMATION
POP 16-19	1351	F	SCHOOL ENROLLMENT, TOTAL (AGES 16-19)	MILLIONS	TRANSFORMATION
POP 20-24	1352	F	SCHOOL ENROLLMENT, TOTAL (AGES 20-24)	MILLIONS	TRANSFORMATION
POP 25-34	1353	F	SCHOOL ENROLLMENT, TOTAL (AGES		

# THE GLOSSARY OF MODIFIABLES FOR CHARITON AGRICULTURAL AND INDUSTRY MODIFI

VARIABLE	UNIT	DESCRIPTION	UNIT	SOURCE
1378 F TOTAL POP..	1378 F	INCL. ARMED FORCES OVERSEAS, MALE, AGES 35 TO 59	MILLIONS	CENSUS P-25
1379 F TOTAL POP..	1379 F	INCL. ARMED FORCES OVERSEAS, MALE, AGES 40 TO 44	MILLIONS	CENSUS P-25
1380 F TOTAL POP..	1380 F	INCL. ARMED FORCES OVERSEAS, MALE, AGES 45 TO 49	MILLIONS	CENSUS P-25
1381 F TOTAL POP..	1381 F	INCL. ARMED FORCES OVERSEAS, MALE, AGES 50 TO 54	MILLIONS	CENSUS P-25
1382 F TOTAL POP..	1382 F	INCL. ARMED FORCES OVERSEAS, MALE, AGES 55 TO 59	MILLIONS	CENSUS P-25
1383 F TOTAL POP..	1383 F	INCL. ARMED FORCES OVERSEAS, MALE, AGES 60 TO 64	MILLIONS	CENSUS P-25
1384 F TOTAL POP..	1384 F	INCL. ARMED FORCES OVERSEAS, MALE, AGES 65 TO 69	MILLIONS	CENSUS P-25
1385 F TOTAL POP..	1385 F	INCL. ARMED FORCES OVERSEAS, MALE, AGES 70 TO 74	MILLIONS	CENSUS P-25
1387 F TOTAL POP..	1387 F	INCL. ARMED FORCES OVERSEAS, MALE, AGES 75 & OVER	MILLIONS	CENSUS P-25
1388 F TOTAL POP..	1388 F	INCL. ARMED FORCES OVERSEAS, MALE, AGES 75 & OVER	MILLIONS	CENSUS P-25
1389 F TOTAL POP..	1389 F	PERSONS TRAVELLING TO WORK BY NON-AUTO MEANS, TOTAL	MILL PERSONS	INTERPOLATED
1390 F TOTAL POP..	1390 F	INCL. ARMED FORCES OVERSEAS, AGES 00-04	MILLIONS	CENSUS P-25
1391 F TOTAL POP..	1391 F	INCL. ARMED FORCES OVERSEAS, AGES 05-09	MILLIONS	CENSUS P-25
1392 F TOTAL POP..	1392 F	INCL. ARMED FORCES OVERSEAS, AGES 10-14	MILLIONS	CENSUS P-25
1393 F TOTAL POP..	1393 F	INCL. ARMED FORCES OVERSEAS, AGES 15	MILLIONS	CENSUS P-25
1394 F TOTAL POP..	1394 F	INCL. ARMED FORCES OVERSEAS, AGES 15 TO 19	MILLIONS	CENSUS P-25
1395 F TOTAL POP..	1395 F	INCL. ARMED FORCES OVERSEAS, AGES 15 TO 19	MILLIONS	CENSUS P-25
1396 F TOTAL POP..	1396 F	INCL. ARMED FORCES OVERSEAS, AGES 16-17	MILLIONS	CENSUS P-25
1397 F TOTAL POP..	1397 F	INCL. ARMED FORCES OVERSEAS, AGES 18-19	MILLIONS	CENSUS P-25
1398 F TOTAL POP..	1398 F	INCL. ARMED FORCES OVERSEAS, AGES 20 TO 24	MILLIONS	CENSUS P-25
1399 F TOTAL POP..	1399 F	INCL. ARMED FORCES OVERSEAS, BOTH SEXES, 20 YRS AND OVER	MILLIONS	CENSUS P-25
1400 F TOTAL POP..	1400 F	INCL. ARMED FORCES OVERSEAS, AGES 25 TO 29	MILLIONS	CENSUS P-25
1401 F TOTAL POP..	1401 F	INCL. ARMED FORCES OVERSEAS, AGES 30 TO 34	MILLIONS	CENSUS P-25
1402 F TOTAL POP..	1402 F	INCL. ARMED FORCES OVERSEAS, AGES 35 TO 39	MILLIONS	CENSUS P-25
1403 F TOTAL POP..	1403 F	INCL. ARMED FORCES OVERSEAS, AGES 40 TO 44	MILLIONS	CENSUS P-25
1404 F TOTAL POP..	1404 F	INCL. ARMED FORCES OVERSEAS, AGES 45 TO 49	MILLIONS	CENSUS P-25
1405 F TOTAL POP..	1405 F	INCL. ARMED FORCES OVERSEAS, AGES 50 TO 54	MILLIONS	CENSUS P-25
1406 F TOTAL POP..	1406 F	INCL. ARMED FORCES OVERSEAS, AGES 55 TO 59	MILLIONS	CENSUS P-25
1407 F TOTAL POP..	1407 F	INCL. ARMED FORCES OVERSEAS, AGES 60 TO 64	MILLIONS	CENSUS P-25
1408 F TOTAL POP..	1408 F	INCL. ARMED FORCES OVERSEAS, AGES 65 TO 69	MILLIONS	CENSUS P-25
1409 F TOTAL POP..	1409 F	INCL. ARMED FORCES OVERSEAS, AGES 70 TO 74	MILLIONS	CENSUS P-25
1410 F TOTAL POP..	1410 F	INCL. ARMED FORCES OVERSEAS, AGES 75 AND OVER	MILLIONS	CENSUS P-25
1411 F TOTAL POP..	1411 F	LABOR FORCE PARTICIPATION RATE, BOTH SEXES, TOTAL	FRACTION	TRANSFORMATION
1412 F TOTAL POP..	1412 F	LABOR FORCE PARTICIPATION RATE, FEMALES, AGES 16-19	FRACTION	TRANSFORMATION
1413 F TOTAL POP..	1413 F	LABOR FORCE PARTICIPATION RATE, FEMALES, 16 & OVER	FRACTION	TRANSFORMATION
1414 F TOTAL POP..	1414 F	LABOR FORCE PARTICIPATION RATE, FEMALES, AGES 20-24	FRACTION	TRANSFORMATION
1415 F TOTAL POP..	1415 F	LABOR FORCE PARTICIPATION RATE, FEMALES, AGES 25-34	FRACTION	TRANSFORMATION
1416 F TOTAL POP..	1416 F	LABOR FORCE PARTICIPATION RATE, FEMALES, AGES 35-44	FRACTION	TRANSFORMATION
1417 F TOTAL POP..	1417 F	LABOR FORCE PARTICIPATION RATE, FEMALES, AGES 45-54	FRACTION	TRANSFORMATION
1418 F TOTAL POP..	1418 F	LABOR FORCE PARTICIPATION RATE, FEMALES, AGES 55-64	FRACTION	TRANSFORMATION
1419 F TOTAL POP..	1419 F	LABOR FORCE PARTICIPATION RATE, FEMALES, AGES 65 & OVER	FRACTION	TRANSFORMATION
1420 F TOTAL POP..	1420 F	LABOR FORCE PARTICIPATION RATE, MALES, AGES 16-19	FRACTION	TRANSFORMATION
1421 F TOTAL POP..	1421 F	LABOR FORCE PARTICIPATION RATE, MALES, AGES 20-24	FRACTION	TRANSFORMATION
1422 F TOTAL POP..	1422 F	LABOR FORCE PARTICIPATION RATE, MALES, AGES 25-34	FRACTION	TRANSFORMATION
1423 F TOTAL POP..	1423 F	LABOR FORCE PARTICIPATION RATE, MALES, AGES 35-44	FRACTION	TRANSFORMATION
1424 F TOTAL POP..	1424 F	LABOR FORCE PARTICIPATION RATE, MALES, AGES 45-54	FRACTION	TRANSFORMATION
1425 F TOTAL POP..	1425 F	LABOR FORCE PARTICIPATION RATE, MALES, AGES 55-64	FRACTION	TRANSFORMATION
1426 F TOTAL POP..	1426 F	LABOR FORCE PARTICIPATION RATE, MALES, AGES 65 & OVER	FRACTION	TRANSFORMATION





# APPLICATIONS OF DIFFERENTIAL EQUATIONS

[illegible]

# THE CLASSIFICATION OF MODEL VARIETIES FOR THE CLASSIFICATION OF MODEL VARIETIES FOR

VARIABLE	NUMBER	TYPE	DESCRIPTION	UNITS	SOURCE
POCE1	653	I	IMPLICIT DEFLECTOR, PERSONAL CONSUMP	1972 = 100.	SCR 7.12 - L016
POCE2	555	H	IMPL DEF, PERSONAL CONSUMP EXPEND, NONDURABLES, CLOTHING&SHOES	1972 = 100.	SCR 7.12 - L023
POCE3	1110	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE4	1047	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE5	1133	I	IMPORTED FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE6	554	H	IMPLICIT DEFLECTOR, PERSONAL CONSUMP EXPEND, NONDURABLES, FOOD	1972 = 100.	SCR 7.12 - L017
POCE7	1109	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE8	1046	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE9	1132	I	IMPORTED FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE10	556	H	IMPL DEF, PERSONAL CONSUMP EXPEND, NONDURABLES, GASOLINE & OIL	1972 = 100.	SCR 7.12 - L027
POCE11	1111	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE12	1048	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE13	1134	I	IMPORTED FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE14	557	H	IMPL DEF, PERSONAL CONSUMP EXPEND, OTHER (FUEL OIL + OTHER)	1972 = 100.	SCR 7.12 - L037
POCE15	1112	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE16	1049	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE17	1135	I	IMPORTED FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE18	558	H	IMPLICIT DEFLECTOR, PERSONAL CONSUMP EXPEND, SERVICES, HOUSING	1972 = 100.	SCR 7.12 - L038
POCE19	1113	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE20	1050	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE21	1136	I	IMPORTED FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE22	561	H	IMPL DEF, PERSONAL CONSUMP EXPEND, SERVICES, OTHER	1972 = 100.	SCR 7.12 - L060
POCE23	1116	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE24	1093	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE25	1139	I	IMPORTED FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE26	559	H	IMPLICIT DEFLECTOR, PERSONAL CONSUMP EXPEND, SERVICES, HSHLD OPERATION	1972 = 100.	SCR 7.12 - L043
POCE27	1114	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE28	1091	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE29	1137	I	IMPORTED FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE30	560	H	IMPL DEF, PERSONAL CONSUMP EXPEND, SERVICES, TRANSPORTATION	1972 = 100.	SCR 7.12 - L050
POCE31	1115	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE32	1092	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE33	1138	I	IMPORTED FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE34	305	I	IMPLICIT DEFLECTOR, GROSS NATIONAL PRODUCT	1972 = 100.	SCR 7.1
POCE35	564	H	IMPLICIT DEF, GOVT PURCHASES OF GOODS & SERVICES, FEDERAL	1972 = 100.	SCR 7.1
POCE36	1119	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE37	1096	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE38	1142	I	IMPORTED FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE39	565	H	IMPLICIT DEF, GOVT PURCHASES OF GOODS & SERVICES, STATE & LOCAL	1972 = 100.	SCR 7.1
POCE40	1120	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE41	1097	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE42	1143	I	IMPORTED FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE43	568	I	IMPLICIT DEFLECTOR, GOVERNMENT PURCHASES OF GOODS & SERVICES	1972 = 100.	SCR 7.1
POCE44	562	I	IMPLICIT DEFLECTOR, FIXED INVESTMENT, TOTAL	1972 = 100.	SCR 7.1
POCE45	493	H	IMPLICIT DEFLECTOR, FIXED INVESTMENT, NONRESIDENTIAL	1972 = 100.	SCR 7.1
POCE46	1117	I	DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION
POCE47	1094	I	EST. DOMESTIC FINAL DEMAND DEFLECTOR	INDEX = 1972=100	TRANSFORMATION



# THE COMPARTMENTAL VARIANTS FOR

VARIABLE	NUMBER	TYPE	DESCRIPTION	UNITS	SOURCE
PI100	1100	I	IMPORTED FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00R	600 R	R	IMPLICIT DEFLATOR, FIXED INVESTMENT, RESIDENTIAL	1972 = 100	SCR 7.1
PI00RND	1100 R	R	DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RE	700 R	R	IMPLICIT DEFL, FIXED INVEST, RESIDENTIAL, PRODUCERS' DUR EQUIP	1972 = 100	SCR 7.1
PI00RE	573 R	R	IMPLICIT DEFLATOR, FIXED INVEST, RESIDENTIAL, FARM STRUCTURES	1972 = 100	SCR 7.1
PI00RNDT	1005 R	R	EST. DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDT	1101 R	R	IMPORTED FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RND	566 R	R	IMPLICIT DEFL, FIXED INVEST, RESIDENTIAL, NONFARM STRUCTURES	1972 = 100	SCR 7.1
PI00RNDH	900 R	R	IMPI DEFLATOR, INVESTMENT, RFS, NONFARM, MOBILE HOMES	1972=100	SCR 7.13
PI00RNDH	1153 R	R	EST. DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	121 R	R	IMPLICIT DEFLATOR, GROSS DOMESTIC PROD DRIC, GENERAL GOVERNMENT	1972 = 100	SCR 7.5
PI00RNDH	900 R	R	IMPLICIT DEFLATOR, NATIONAL INCOME	1972 = 100	SCR 7.6
PI00RNDH	423 R	R	AIR TRAVEL DEFLATOR, DOMESTIC PASSENGER SERVICE	1972 = 100	TRANSFORMATION
PI00RNDH	422 R	R	AIR TRAVEL DEFLATOR, INTERNATIONAL PASSENGER SERVICE	1972 = 100	TRANSFORMATION
PI00RNDH	563 R	R	IMPLICIT DEFLATOR, U.S. EXPORTS OF GOODS AND SERVICES	1972 = 100	SCR 7.1
PI00RNDH	473 R	R	IMPLICIT DEFLATOR, U.S. EXPORTS, SERVICES AND DEFENSE	1972 = 100	TRANSFORMATION
PI00RNDH	1155 R	R	EXPORTS: DEFLATOR FOR SERVICES PLUS OTHER	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	1125 R	R	DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	1102 R	R	EST. DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	1108 R	R	IMPORTED FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	472 R	R	IMPLICIT DEFLATOR, U.S. MERCHANDISE EXPORTS, SCHEDULE R, TOTAL	1972 = 100	TRANSFORMATION
PI00RNDH	405 R	R	UNIT VALUE INDEX, U.S. DOMESTIC EXPORTS, CRUDE MATERIALS	1972 = 100	TRANSFORMATION
PI00RNDH	1122 R	R	DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	1009 R	R	EST. DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	1145 R	R	IMPORTED FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	404 R	R	UNIT VALUE INDEX, U.S. DOM EXPORTS, WTD AVG, CRUDE & MFG'D FOODS	1972 = 100	TRANSFORMATION
PI00RNDH	1121 R	R	DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	1008 R	R	EST. DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	1104 R	R	IMPORTED FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	406 R	R	UNIT VALUE INDEX, U.S. DOM EXPORTS, WTD AVG, FINISHED & SEMI MFG	1972 = 100	TRANSFORMATION
PI00RNDH	1120 R	R	DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	1101 R	R	EST. DOMESTIC FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	1147 R	R	IMPORTED FINAL DEMAND DEFLATOR	INDEX = 1972=100	TRANSFORMATION
PI00RNDH	795 R	R	UNIT VALUE INDEX, EXPORTS, WORLD (Tr U.S. \$)	1972 = 100	SCR 7.1
PI00RNDH	124 R	R	IMPLICIT DEFLATOR, U.S. IMPORTS OF GOODS AND SERVICES	1972 = 100	TRANSFORMATION
PI00RNDH	916 R	R	IMPLICIT DEFLATOR, U.S. GENERAL MERCH IMPORTS, SCHED A, TOTAL	1972 = 100	TRANSFORMATION
PI00RNDH	900 R	R	UNIT VALUE INDEX, US GEN IMPORTS, SCHED A, MIN FUEL, OTHER REFINED	1972 = 100	TRANSFORMATION
PI00RNDH	905 R	R	UNIT VALUE INDEX, U.S. GEN IMPORTS, SCHED A, MIN FUEL, COAL ETC.	1972 = 100	TRANSFORMATION
PI00RNDH	902 R	R	UNIT VALUE INDEX, US GEN IMPORTS, MIN FUEL, CRUDE PETROLEUM	1972 = 100	TRANSFORMATION
PI00RNDH	905 R	R	UNIT VALUE INDEX, US GEN IMPORTS, MIN FUEL, CRUDE PETROLEUM	1972 = 100	TRANSFORMATION
PI00RNDH	904 R	R	UNIT VALUE INDEX, US GEN IMPORTS, MIN FUEL, CRUDE PETROLEUM	1972 = 100	TRANSFORMATION
PI00RNDH	624 R	R	EXPORTS, UNIT VALUE INDEX, CRUDE MATERIALS	1972 = 100	TRANSFORMATION
PI00RNDH	622 R	R	UNIT VALUE INDEX, U.S. GEN IMPORTS, AVERAGE, CRUDE & MFG'D FOODS	1972 = 100	TRANSFORMATION
PI00RNDH	603 R	R	EXPORTS, UNIT VALUE INDEX, CRUDE FOODS	1972 = 100	TRANSFORMATION
PI00RNDH	623 R	R	EXPORTS, UNIT VALUE INDEX, MANUFACTURED FOODS	1972 = 100	TRANSFORMATION
PI00RNDH	602 R	R	UNIT VALUE INDEX, U.S. GEN IMPORTS, WTD AVG, SPRT & FINISHED MFG	1972 = 100	TRANSFORMATION

# GLOSSARY OF FODDER VARIETALS FOR THE COUNTRY AND INDUSTRY MODEL

NUMBER	TABLE	UNIT TYPE	DESCRIPTION	UNIT	SOURCE
626	F	EXPORTS	UNIT VALUE INDEX, FINISHED MANUFACTURES	1972 = 100.	TRANSFORMATION
625	F	IMPORTS	UNIT VALUE INDEX, SEMI-MANUFACTURES	1972 = 100.	TRANSFORMATION
854	M	U.S. DOMESTIC PRICE	FOR EXPORTS, FUEL (AVG. 1950-1 & 1956-1)	1972 = 100.	TRANSFORMATION
1123	I	DOMESTIC FINAL DEMAND DEFLECTOR	EXPORTS: FUELS	INDEX = 1972 = 100	TRANSFORMATION
1100	I	DOMESTIC FINAL DEMAND DEFLECTOR	EXPORTS: FUELS	INDEX = 1972 = 100	TRANSFORMATION
1146	I	IMPORTED FINAL DEMAND DEFLECTOR	EXPORTS: FUELS	INDEX = 1972 = 100	TRANSFORMATION
1007	T	UNIT PURCHASE PRICE, "M" CARS		THOU. CONSTANT \$	TRANSFORMATION
743	I	AVERAGE VALUE OF HOUSING START		10 THOU. CURRENT \$	TRANSFORMATION
900	R	AVERAGE VALUE OF HOUSING START, MOBILE HOMES		10 THOU. CURRENT \$	TRANSFORMATION
949	R	UNIT PRICE, AVERAGE VALUE OF MULTI-UNIT HOUSING STARTS		10 THOU. CURR \$	TRANSFORMATION
978	M	UNIT PRICE, AVERAGE VALUE OF SINGLE UNIT HOUSING STARTS		10 THOU. CURR \$	TRANSFORMATION
707	I	UNIT PRICE, RETAIL, REG. GRADE GASOLINE, INCLUDING TAXES		CENTS/GALLON	PLATT'S HANDBOOK
709	I	UNIT PRICE, RETAIL, REG. GRADE GAS, ST & FEDERAL TAXES		CENTS/GALLON	PLATT'S HANDBOOK
800	F	UNIT PRICE, RETAIL, REGULAR GRADE GASOLINE, TAXES, FEDERAL		CENTS/GALLON	PLATT'S HANDBOOK
801	F	UNIT PRICE, RETAIL, REGULAR GRADE GASOLINE, TAXES, STATE & LOCAL		CENTS/GALLON	PLATT'S HANDBOOK
704	R	UNIT PRICE, RETAIL, REG. GRADE GASOLINE, EXCLUDING TAXES		CENTS/GALLON	PLATT'S HANDBOOK
805	F	UNIT PRICE, U.S. MERCHANT IMPORTS, SCHED. A, MIN. FUEL, OTHER REFINED		DOLLARS/HARREL	TRANSFORMATION
801	F	UNIT PRICE, U.S. MERCHANT IMPORTS, SCHED. A, MIN. FUEL, COAL FIC		DOLLARS/HARREL	TRANSFORMATION
802	F	UNIT PRICE, U.S. MERCHANT IMPORTS, SCHED. A, MIN. FUEL, CRUDE PETROL		DOLLARS/HARREL	TRANSFORMATION
803	F	UNIT PRICE, U.S. MERCHANT IMPORTS, SCHED. A, MIN. FUEL, RESID FUEL OIL		DOLLARS/HARREL	TRANSFORMATION
804	F	UNIT PRICE, U.S. MERCHANT IMPORTS, SCHED. A, MIN. FUEL, NAT. GAS		CENTS/THOU. CU. FT	TRANSFORMATION
936	M	WHOLESALE PRICE INDEX, ALL COMMODITIES		1967 = 100.	HL'S MPI REPORT
901	R	WHOLESALE PRICE INDEX, BY DURABILITY, TOTAL MANUFACTURES		1967 = 100.	HL'S MPI REPORT
935	R	WHOLESALE PRICE INDEX, BY PROCESS STAGE, CRUDE MAT. FOR MORE PROCESS		1967 = 100.	HL'S MPI REPORT
940	R	WHOLESALE PRICE INDEX, BY PROCESS STAGE, FINISHED GOODS		1967 = 100.	HL'S MPI REPORT
939	P	WHOLESALE PRICE INDEX, BY PROCESS STAGE, FINISHED GOODS, CONSUMER		1967 = 100.	HL'S MPI REPORT
938	P	WHOLESALE PRICE INDEX, BY PROCESS STAGE, FINISHED GOODS, PRODUCER		1967 = 100.	HL'S MPI REPORT
937	R	WHOLESALE PRICE INDEX, BY PROCESS STAGE, INTERMEDIATE MAT. & SUPPLY		1967 = 100.	HL'S MPI REPORT
94	R	UNIT GPU DEFLECTOR: AGRICULTURE, FORESTRY & FISHERIES, AG. SERVICE		1972 = 100.	BFA WORKFILE
933	R	UNIT GPU DEFLECTOR: CONTRACT CONSTRUCTION & FISHERIES, AG. SERVICE		1972 = 100.	BFA WORKFILE
96	I	OUTPUT, PRICE DEFLECTOR, GPORS		1972 = 100.	TRANSFORMATION
301	I	UNIT GPU DEFLECTOR: GOVERNMENT AND GOVERNMENT ENTERPRISES, TOTAL		1972 = 100.	BFA WORKFILE
122	R	UNIT GPU DEFLECTOR: GOVERNMENT FEDERAL ENTERPRISES		1972 = 100.	BFA WORKFILE
123	R	UNIT GPU DEFLECTOR: GOVERNMENT STATE & LOCAL, GENERAL		1972 = 100.	BFA WORKFILE
207	I	UNIT GPU DEFLECTOR: MANUFACTURING, TOTAL		1972 = 100.	BFA WORKFILE
207	I	UNIT GPU DEFLECTOR: MANUFACTURING, DURABLE GOODS		1972 = 100.	BFA WORKFILE
107	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
108	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
109	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
110	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
111	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
112	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
113	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
114	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
260	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
115	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
116	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE
117	R	UNIT GPU DEFLECTOR: DURABLE FURNITURE & HOME PRODUCTS, EX. FURN.		1972 = 100.	BFA WORKFILE



# THE WASHINGTON ANNUAL AND INDUSTRY MODEL

VARIABLE	CURRENT TYPE	DEFINITION	UNIT	SOURCE
PAGE-F120	298 F	10PL GPU DEFLATOR; MANUFACTURING, NONDURABLE GOODS	1972 = 100	HEA WORKFILE
PAGE-F121	97 F	10PL GPU DEFLATOR; MFG, NONDUR. FOOD & KINDRED PRODUCTS	1972 = 100	HEA WORKFILE
PAGE-F121	98 F	10PL GPU DEFLATOR; MFG, NONDUR. TOBACCO	1972 = 100	HEA WORKFILE
PAGE-F122	99 F	10PL GPU DEFLATOR; MFG, NONDUR. APPAREL & RELATED PRODUCTS	1972 = 100	HEA WORKFILE
PAGE-F123	100 F	10PL GPU DEFLATOR; MFG, NONDUR. APPAREL & RELATED PRODUCTS	1972 = 100	HEA WORKFILE
PAGE-F124	101 F	10PL GPU DEFLATOR; MFG, NONDUR. PAPER & ALLIED PRODUCTS	1972 = 100	HEA WORKFILE
PAGE-F127	102 F	10PL GPU DEFLATOR; MFG, NONDUR. PRINTING & PUBLISHING	1972 = 100	HEA WORKFILE
PAGE-F128	103 F	10PL GPU DEFLATOR; MFG, NONDUR. CHEMICALS & ALLIED PRODUCTS	1972 = 100	HEA WORKFILE
PAGE-F129	104 F	10PL GPU DEFLATOR; MFG, NONDUR. PETROLEUM & RELATED INDUSTRIES	1972 = 100	HEA WORKFILE
PAGE-F130	105 F	10PL GPU DEFLATOR; MFG, NONDUR. RUBBER & MISC PLASTIC PRODUCTS	1972 = 100	HEA WORKFILE
PAGE-F131	106 F	10PL GPU DEFLATOR; MFG, NONDUR. LEATHER & LEATHER PRODUCTS	1972 = 100	HEA WORKFILE
PAGE-F132	95 F	10PL GPU DEFLATOR; MINING; TOTAL	1972 = 100	HEA WORKFILE
PAGE-F133	125 F	OUTPUT, PRICE DEFLATOR, INVENTORY VALUATION ADJUSTMENT	1972 = 100	SERIES NOT AVAILABLE
PAGE-F134	119 F	10PL GPU DEFLATOR; TRANSPORTATION, TOTAL	1972 = 100	HEA WORKFILE
PAGE-F135	118 F	10PL GPU DEFLATOR; TRANSPORTATION, TOTAL	1972 = 100	HEA WORKFILE
PAGE-F136	120 F	10PL GPU DEFLATOR; ELECTRIC, GAS & SANITARY SERVICES	1972 = 100	HEA WORKFILE
PAGE-F137	930 F	10PL GPU DEFLATOR; SERVICES, TOTAL	1972 = 100	HEA WORKFILE
PAGE-F138	1170 F	10PL GPU DEFLATOR; MFG, NONDUR. COMMERCIAL AND OTHER	1972 = 100	HEA WORKFILE
PAGE-F139	1006 F	OUTPUT, PRICE DEFL, W/O IRT, MFG, NONDUR, PETROLEUM	1972 = 100	HEA WORKFILE
PAGE-F140	1003 F	OUTPUT, PRICE DEFLATOR, W/O IRT, MINING	1972 = 100	HEA WORKFILE
PAGE-F141	1060 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS.	PERCENTAGE	TRANSFORMATION
PAGE-F142	1054 F	RATIO: PERSONAL CONS OF NEW AUTOS TO TOTAL CONSUMPTION	RATIO	TRANSFORMATION
PAGE-F143	1057 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. NEW AUTOS	PERCENTAGE	TRANSFORMATION
PAGE-F144	1059 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. TRUCKS & RV	PERCENTAGE	TRANSFORMATION
PAGE-F145	1058 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. USED AUTOS	PERCENTAGE	TRANSFORMATION
PAGE-F146	1061 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. FURNITURE	PERCENTAGE	TRANSFORMATION
PAGE-F147	1062 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. OTH. DUR.	PERCENTAGE	TRANSFORMATION
PAGE-F148	1064 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. CLOTHING	PERCENTAGE	TRANSFORMATION
PAGE-F149	1063 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. FOOD & REV.	PERCENTAGE	TRANSFORMATION
PAGE-F150	1069 F	REAL COST PER GALLON OF GAS	CONSTANT \$	TRANSFORMATION
PAGE-F151	1065 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. GASOLINE	PERCENTAGE	TRANSFORMATION
PAGE-F152	1066 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. OTH. NONDUR.	PERCENTAGE	TRANSFORMATION
PAGE-F153	1067 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. HOUSING SERV.	PERCENTAGE	TRANSFORMATION
PAGE-F154	1070 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. OTH. SERVICES	PERCENTAGE	TRANSFORMATION
PAGE-F155	1068 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. HH OP. SERV.	PERCENTAGE	TRANSFORMATION
PAGE-F156	1069 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; CONS, EXP. TRANS. SERV.	PERCENTAGE	TRANSFORMATION
PAGE-F157	1071 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; FFD, GOV. PURCHASES	PERCENTAGE	TRANSFORMATION
PAGE-F158	1070 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; SKL GOV. PURCHASES	PERCENTAGE	TRANSFORMATION
PAGE-F159	1071 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; NONRESIDENTIAL INVEST.	PERCENTAGE	TRANSFORMATION
PAGE-F160	1072 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; RESIDENTIAL INVEST.	PERCENTAGE	TRANSFORMATION
PAGE-F161	1079 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; EXPORTS: SERV. & OTH.	PERCENTAGE	TRANSFORMATION
PAGE-F162	1075 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; EXPORTS: FOOD	PERCENTAGE	TRANSFORMATION
PAGE-F163	1076 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; EXPORTS: CRUDE MATER.	PERCENTAGE	TRANSFORMATION
PAGE-F164	1077 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; EXPORTS: FUELS	PERCENTAGE	TRANSFORMATION
PAGE-F165	1078 F	RATIO: IMPORTED FINAL DEMAND / FIN DEM; EXPORTS: MFG. GOODS	PERCENTAGE	TRANSFORMATION
PAGE-F166	1010 F	PERCENTAGE: CONTRIBUTION FOR SUPPLIES TO PERS. IN LESS TRANSFERS	PERCENT	TRANSFORMATION
PAGE-F167	965 F	RATIO: SHARE OF INDIVIDUAL RETIRES WITH STD DEFECTON TO TOTAL	RATIO	TRANSFORMATION
PAGE-F168	1160 F	PERCENT OF PRIVATE EARNINGS COVERED BY SOCIAL SECURITY	PERCENT	TRANSFORMATION

# THE SERVICE OF THE FUTURE

[illegible]

COMMODITY	UNIT	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	2949	2950	2951	2952	2953	2954	2955	2956	2957	2958	2959	2960	2961	2962	2963	2964	2965	2966	2967	2968	2969	2970	2971	2972	2973	2974	2975	2976	2977	2978	2979	2980	2981	2982	2983	2984	2985	2986	2987	2988	2989	2990	2991	2992	2993	2994	2995	2996	2997	2998	2999	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	3028	3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039	3040	3041	3042	3043	3044	3045	3046	3047	3048	3049	3050	3051	3052	3053	3054	3055	3056	3057	3058	3059	3060	3061	3062	3063	3064	3065	3066	3067	3068	3069	3070	3071	3072	3073	3074	3075	3076	3077	3078	3079	3080	3081	3082	3083	3084	3085	3086	3087	3088	3089	3090	3091	3092	3093	3094	3095	3096	3097	3098	3099	3100	3101	3102	3103	3104	3105	3106	3107	3108	3109	3110	3111	3112	3113	3114	3115	3116	3117	3118	3119	3120	3121	3122	3123	3124	3125	3126	3127	3128	3129	3130	3131	3132	3133	3134	3135	3136	3137	3138	3139	3140	3141	3142	3143	3144	3145	3146	3147	3148	3149	3150	3151	3152	3153	3154	3155	3156	3157	3158	3159	3160	3161	3162	3163	3164	3165	3166	3167	3168	3169	3170	3171	3172	3173	3174	3175	3176	3177	3178	3179	3180	3181	3182	3183	3184	3185	3186	3187	3188	3189	3190	3191	3192	3193	3194	3195	3196	3197	3198	3199	3200	3201	3202	3203	3204	3205	3206	3207	3208	3209	3210	3211	3212	3213	3214	3215	3216	3217	3218	3219	3220	3221	3222	3223	3224	3225	3226	3227	3228	3229	3230	3231	3232	3233	3234	3235	3236	3237	3238	3239	3240	3241	3242	3243	3244	3245	3246	3247	3248	3249	3250	3251	3252	3253	3254	3255	3256	3257	3258	3259	3260	3261	3262	3263	3264	3265	3266	3267	3268	3269	3270	3271	3272	3273	3274	3275	3276	3277	3278	3279	3280	3281	3282	3283	3284	3285	3286	3287	3288	3289	3290	3291	3292	3293	3294	3295	3296	3297	3298	3299	3300	3301	3302	3303	3304	3305	3306	3307	3308	3309	3310	3311	3312	3313	3314	3315	3316	3317	3318	3319	3320	3321	3322	3323	3324	3325	3326	3327	3328	3329	3330	3331	3332	3333	3334	3335	3336	3337	3338	3339	3340	3341	3342	3343	3344	3345
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# THE GLOSSARY OF MODEL VARIABLES FOR THE QUANTITATIVE ANALYSIS OF INDUSTRY MODEL

VARIABLE	NUMBER	TYPE	DESCRIPTION	UNIT	SOURCE
TRGTH3A	879 F		U.S. GFT IMPORTS, SCHED A, AUTO FUELBLN, NATURAL GAS	BILL CURRIC FIFT	AMERICAN GAS ASS
TRGTH3B	867 T		U.S. MERCHANDISE IMPORTS, END-USE, AUTOMOTIVE VEHICLES & PARTS	BILL CURRENT \$	SCR HUP 3-DB4
TRGTH3C	616 T		U.S. MERCHANDISE IMPORTS, END-USE, AUTOS & PARTS, FROM CANADA	BILL CURRENT \$	SCR HUP 3-DB5
TRGTH3C/CENAS	898 F		RATIO, CANADIAN IMPORTED AUTOS TO TOTAL AUTOM PART CONSUMPTION	RATIO	TRANSFORMATION
TRGTH3D	617 T		U.S. MERCHANDISE IMPORTS, END-USE, AUTOPARTS, EXCEPT CANADIAN	BILL CURRENT \$	TRANSFORMATION
TRGTH3E/CENAS	899 F		RATIO, 100%-CANADIAN IMPORTED AUTOS TO TOTAL AUTOPART CONSUMPTION	RATIO	TRANSFORMATION
TRGTH4	465 F		TRANSFER PAYMENTS, BUSINESS	BILL CURRENT \$	SCR 1.9
TRGTH5	543 T		FED GOVT EXPEND, TRANSFER PAYMENTS, TOTAL	BILL CURRENT \$	SCR 3.2
TRGTH6	542 F		FED GOVT EXPEND, TRANSFER PAYMENTS, TO FOREIGNERS	BILL CURRENT \$	SCR 3.2
TRGTH7	1175 T		FEDERAL GOVT EXPENDITURES, TRANSFER PAYMENTS, TO PERSONS	BILL CONSTANT \$	TRANSFORMATION
TRGTH8	492 T		FED GOVT EXPEND, TRANSFER PAYMENTS, TO PERSONS	BILL CURRENT \$	SCR 3.2
TRGTH9	1014 F		FED GOVT EXPEND, TRANSFER PAY, TO PERSONS, FOOD STAMP BENEFITS	BILL CONSTANT \$	TRANSFORMATION
TRGTH10	1177 F		FED GOVT EXPEND, TRANSFER PAY, TO PERSONS, MIL RETIRE + VETERAN BENEFIT	BILL CONSTANT \$	TRANSFORMATION
TRGTH11	1178 F		FED GOVT EXPEND, TRANSFER PAY, TO PERSONS, MEDICARE	BILL CONSTANT \$	TRANSFORMATION
TRGTH12	1015 F		FED GOVT EXPEND, TRANSFER PAY, TO PERSONS, SOC SEC BENEFITS	BILL CONSTANT \$	TRANSFORMATION
TRGTH13	1176 F		FED GOVT EXPEND, TRANSFER PAY, TO PERSONS, MEDICARE	BILL CONSTANT \$	TRANSFORMATION
TRGTH14	1179 F		ST & LOCAL GOVT EXPENDITURES, TRANSFER PAYMENTS TO PERSONS	BILL CURRENT \$	SCR 3.4
TRGTH15	495 T		ST & LOCAL GOVT EXPENDITURES, TRANSFER PAYMENTS TO PERSONS	BILL CURRENT \$	SCR 3.4
TRGTH16	540 F		PERSONAL TRANSFER PAYMENTS TO FOREIGNERS, NET	BILL CURRENT \$	SCR 2.1
TRGTH17	497 T		TRANSFER PAYMENTS TO PERSONS, TOTAL	BILL CONSTANT \$	TRANSFORMATION
TRGTH18	494 T		TRANSFER PAYMENTS TO PERSONS, GOVT UNEMPLOYMENT INSURANCE	BILL CURRENT \$	SCR 2.1
TRGTH19	493 T		TRANSFER PAYMENTS TO PERSONS, GOVT UNEMPLOYMENT INSURANCE	BILL CONSTANT \$	TRANSFORMATION
TRGTH20	491 F		TRANSFER PAYMENTS TO PERSONS, GOVT UNEMPLOYMENT INSURANCE	BILL CURRENT \$	SCR 2.1
TRGTH21	464 T		INDIRECT BUSINESS TAXES AND MONTAX LIABILITY	BILL CURRENT \$	SCR 1.9
TRGTH22	471 F		FEDERAL GOVT RECEIPTS, INDIRECT BUSINESS TAX & MONTAX ACCRUALS	BILL CURRENT \$	SCR 3.2
TRGTH23	951 T		IMPLICIT TAX RATE, FEDERAL, NON GAS TAX BUS TAX COLLECTIONS	PERCENT	TRANSFORMATION
TRGTH24	802 F		FED GOVT RECEIPTS, IND BUS TAX & MONTAX, EXCISE TAXES, GASOLINE	BILL CURRENT \$	TRANSFORMATION
TRGTH25	1173 F		FED GOVT REC, INDIRECT BUSINESS TAXES, ENERGY BILL RECEIPTS	BILL CURRENT \$	WHARTON F.F.A.
TRGTH26	476 F		ST & LOCAL RECEIPTS, INDIRECT BUSINESS TAX AND MONTAX ACCRUALS	BILL CURRENT \$	SCR 3.4
TRGTH27	950 T		IMPLICIT TAX RATE, ST & LOCAL, NON GAS TAX BUS TAX COLLECTIONS	PERCENT	TRANSFORMATION
TRGTH28	803 F		ST & LOCAL RECEIPTS, IND BUS TAX & MONTAXES, SALES TAXES, GASOLINE	BILL CURRENT \$	TRANSFORMATION
TRGTH29	482 F		FEDERAL GOVT RECEIPTS, CORPORATE PROFITS TAX ACCRUALS	BILL CURRENT \$	SCR 3.2
TRGTH30	484 F		STATE & LOCAL GOVT RECEIPTS, CORPORATE PROFITS TAX ACCRUALS	BILL CURRENT \$	SCR 3.4
TRGTH31	460 T		CORPORATE PROFITS TAX LIABILITY, TOTAL	BILL CURRENT \$	SCR 1.13
TRGTH32	535 T		PERSONAL TAX AND MONTAX LIABILITY, TOTAL	BILL CURRENT \$	SCR 3.2
TRGTH33	523 F		FEDERAL GOVT RECEIPTS, PERSONAL TAX AND MONTAX RECEIPTS	BILL CURRENT \$	SCR 3.4
TRGTH34	511 F		ST & LOCAL GOVT RECEIPTS, PERSONAL TAX & MONTAX RECEIPTS	BILL CURRENT \$	SCR 3.2
TRGTH35	496 T		FEDERAL GOVT RECEIPTS, CONTRIBUTIONS FOR SOCIAL INSURANCE	BILL CURRENT \$	SCR 3.4
TRGTH36	1170 F		FED GOVT REC, CONTRIB FOR SOCIAL INS, TOTAL LESS GASOLINE CONTRIB	BILL CURRENT \$	SCR 3.2
TRGTH37	1169 F		FED GOVT REC, CONTRIB FOR SOCIAL INS, TOTAL, GASOLINE	BILL CURRENT \$	TRANSFORMATION
TRGTH38	502 F		ST & LOCAL GOVT RECEIPTS, CONTRIBUTIONS FOR SOCIAL INSURANCE	BILL CURRENT \$	TRANSFORMATION
TRGTH39	505 T		CONTRIBUTIONS FOR SOCIAL INSURANCE, PERSONAL	BILL CURRENT \$	SCR 3.4
TRGTH40	506 F		RATIO, EMPLOYEE CONTRIBUTIONS FOR SOC. INS. TO TOTAL	PERCENT	TRANSFORMATION
TRGTH41	504 T		CONTRIBUTIONS FOR SOCIAL INSURANCE, TOTAL	BILL CURRENT \$	SCR 1.9
TRGTH42	500 T		PERSONAL FEDERAL TAXES, VALUE OF TOTAL INDIVIDUAL DEDUCTIONS	BILL CURRENT \$	INCOME STAT-FORM
TRGTH43	461 F		PER'S FED TAXES, VALUE OF TOTAL INDIVIDUAL ITEMIZED DEDUCTIONS	BILL CURRENT \$	INCOME STAT-FORM
TRGTH44	954 F		PER'S FED TAXES, VALUE OF ITEMIZED DEDUCTIONS PER INDIVIDUAL RETURN	THOU CURRENT \$	TRANSFORMATION
TRGTH45	961 T		PER'S FED TAXES, VALUE OF TOTAL INDIVIDUAL STANDARD DEDUCTIONS	BILL CURRENT \$	TRANSFORMATION



# THE "HAPPY" ADAPTATION OF VARIOUS FOLK

[illegible]

VARIABLE	UNIT	DESCRIPTION	UNIT	SOURCE
EXPENSE	122 F	EFFECTIVE CORP. TAX RATE, TRANSPORTATION	PERCENT	TRANSFORMATION
EXPENSE	123 F	EFFECTIVE CORP. TAX RATE, UTILITIES	PERCENT	TRANSFORMATION
EXPENSE	531 F	TAX RATE, PERSONAL INCOME, FEDERAL	PERCENT	TRANSFORMATION
EXPENSE	532 F	EFFECTIVE PERSONAL INCOME TAX RATE, HOMEOWNERS	PERCENT	TRANSFORMATION
EXPENSE	533 F	EFFECTIVE PERSONAL INCOME TAX RATE, LANDLORDS	PERCENT	TRANSFORMATION
EXPENSE	534 F	TAX RATE, PERSONAL INCOME, STATE	PERCENT	TRANSFORMATION
EXPENSE	535 F	EFFECTIVE PERS INC TAX RT, ALL STATES WITH INCOME TAX	PERCENT	TRANSFORMATION
EXPENSE	536 F	PERSONAL INCOME TAX RATE AT 1ST BRACKET	PERCENT	PECHMAN - IRS
EXPENSE	537 F	PERSONAL INCOME TAX RATE AT 2ND BRACKET	PERCENT	PECHMAN - IRS
EXPENSE	538 F	PERSONAL INCOME TAX RATE AT 3RD BRACKET	PERCENT	PECHMAN - IRS
EXPENSE	539 F	PERSONAL INCOME TAX RATE AT 4TH BRACKET	PERCENT	PECHMAN - IRS
EXPENSE	540 F	PERSONAL INCOME TAX RATE AT 5TH BRACKET	PERCENT	PECHMAN - IRS
EXPENSE	541 F	PERSONAL INCOME TAX RATE AT 6TH BRACKET	PERCENT	PECHMAN - IRS
EXPENSE	542 F	PERSONAL INCOME TAX RATE AT 7TH BRACKET	PERCENT	PECHMAN - IRS
EXPENSE	543 F	PERSONAL INCOME TAX RATE AT 8TH BRACKET	PERCENT	PECHMAN - IRS
EXPENSE	544 F	PERSONAL INCOME TAX RATE AT 9TH BRACKET	PERCENT	PECHMAN - IRS
EXPENSE	545 F	TAX RATE, SOCIAL INSURANCE, FEDERAL	PERCENT	TRANSFORMATION
EXPENSE	546 F	TAX RATE, SOCIAL INSURANCE, STATE	PERCENT	TRANSFORMATION
EXPENSE	547 F	NET TAX RATE, SUM OF EMPLOYER AND EMPLOYEE	PERCENT	SOC SEC RULF IN
EXPENSE	1043 F	UNIT COST, COST OF OPERATING NEW CARS, TOTAL	\$/MILE	TRANSFORMATION
EXPENSE	1044 F	UNIT COST, CAPITALIZED PURCHASE COST OF NEW CARS	\$/MILE	TRANSFORMATION
EXPENSE	1045 F	UNIT COST, OPERATING COST OF NEW CARS, GASOLINE	\$/MILE	TRANSFORMATION
EXPENSE	1046 F	UNIT COST, OPERATING COST OF NEW CARS, OTHER	\$/MILE	TRANSFORMATION
EXPENSE	775 F	USER COST OF CAPITAL, FARM		TRANSFORMATION
EXPENSE	1035 F	USER COST OF CAPITAL, COMMERCIAL & OTHER		TRANSFORMATION
EXPENSE	759 F	USER COST OF CAPITAL, LUMBER		TRANSFORMATION
EXPENSE	760 F	USER COST OF CAPITAL, FURNITURE		TRANSFORMATION
EXPENSE	757 F	USER COST OF CAPITAL, STONE, CLAY & GLASS		TRANSFORMATION
EXPENSE	752 F	USER COST OF CAPITAL, PRIMARY METALS		TRANSFORMATION
EXPENSE	754 F	USER COST OF CAPITAL, FABRICATED METAL PRODUCTS		TRANSFORMATION
EXPENSE	754 F	USER COST OF CAPITAL, NONELECTRICAL MACHINERY		TRANSFORMATION
EXPENSE	753 F	USER COST OF CAPITAL, ELECTRICAL MACHINERY		TRANSFORMATION
EXPENSE	753 F	USER COST OF CAPITAL, IMPAINT TRANS EQUIP + ORDNANCE + MISC MFG		TRANSFORMATION
EXPENSE	755 F	USER COST OF CAPITAL, MOTOR VEHICLES		TRANSFORMATION
EXPENSE	761 F	USER COST OF CAPITAL, INSTRUMENTS		TRANSFORMATION
EXPENSE	762 F	USER COST OF CAPITAL, FOOD & BEVERAGES		TRANSFORMATION
EXPENSE	764 F	USER COST OF CAPITAL, TOBACCO		TRANSFORMATION
EXPENSE	763 F	USER COST OF CAPITAL, TEXTILES		TRANSFORMATION
EXPENSE	769 F	USER COST OF CAPITAL, APPAREL		TRANSFORMATION
EXPENSE	760 F	USER COST OF CAPITAL, PAPER		TRANSFORMATION
EXPENSE	771 F	USER COST OF CAPITAL, PRINTING & PUBLISHING		TRANSFORMATION
EXPENSE	765 F	USER COST OF CAPITAL, CHEMICALS		TRANSFORMATION
EXPENSE	766 F	USER COST OF CAPITAL, PETROLEUM		TRANSFORMATION
EXPENSE	767 F	USER COST OF CAPITAL, RUBBER		TRANSFORMATION
EXPENSE	770 F	USER COST OF CAPITAL, LEATHER		TRANSFORMATION
EXPENSE	751 F	USER COST OF CAPITAL, MINING		TRANSFORMATION
EXPENSE	774 F	USER COST, PESTICIDE, HOUSEHOLDING UNITS, TOTAL (FED MOBILE HOMES)		TRANSFORMATION
EXPENSE	774 F	USER COST, PESTICIDE, COMMUNICATIONS		TRANSFORMATION

[illegible]



# THE SUMMARY OF MODEL VARIABLES FOR THE AMERICAN AND INDUSTRY MODEL

VARIABLE	UNIT TYPE	DESCRIPTION	UNITS	SOURCE
WAGE	154 H	COMPENSATION PER EMPLOYEE PER WK, GOVERNMENT ENTST STATE & LOCAL	CURRENT \$/WEEK	TRANSFORMATION
WAGE21	154 H	COMPENSATION PER MANHR, MFG, DUR, LUMBER AND PRODUCTS	CURRENT \$/HOUR	TRANSFORMATION
WAGE22	154 H	COMPENSATION PER MANHR, MFG, DUR, FURNITURE AND FIXTURES	CURRENT \$/HOUR	TRANSFORMATION
WAGE23	154 H	COMPENSATION PER MANHR, MFG, DUR, STONE, CLAY & GLASS PROD	CURRENT \$/HOUR	TRANSFORMATION
WAGE24	154 H	COMPENSATION PER MANHR, MFG, DUR, PRIMARY METALS	CURRENT \$/HOUR	TRANSFORMATION
WAGE25	154 H	COMPENSATION PER MANHR, MFG, DUR, FABRICATED METALS	CURRENT \$/HOUR	TRANSFORMATION
WAGE26	154 H	COMPENSATION PER MANHR, MFG, DUR, ELECTRICAL MACHINERY	CURRENT \$/HOUR	TRANSFORMATION
WAGE27	154 H	COMPENSATION PER MANHR, MFG, DUR, ELECTRICAL EQUIP & SUPPLY	CURRENT \$/HOUR	TRANSFORMATION
WAGE28	154 H	COMPENSATION PER MANHR, MFG, DUR, AUTOMOTIVE TRANSPORT MFG	CURRENT \$/HOUR	TRANSFORMATION
WAGE29	154 H	COMPENSATION PER MANHR, MFG, DUR, TRANSPORT EQ, MOTOR VEHICLES	CURRENT \$/HOUR	TRANSFORMATION
WAGE30	154 H	COMPENSATION PER MANHR, MFG, DUR, INSTRUMENTS & PRODUCTS	CURRENT \$/HOUR	TRANSFORMATION
WAGE31	154 H	COMPENSATION PER MANHR, MFG, DUR, FOOD & KINDRED PRODUCTS	CURRENT \$/HOUR	TRANSFORMATION
WAGE32	154 H	COMPENSATION PER MANHR, MFG, DUR, TOBACCO & PRODUCTS	CURRENT \$/HOUR	TRANSFORMATION
WAGE33	154 H	COMPENSATION PER MANHR, MFG, DUR, TEXTILES & PRODUCTS	CURRENT \$/HOUR	TRANSFORMATION
WAGE34	154 H	COMPENSATION PER MANHR, MFG, DUR, APPAREL & OTHER TEXTILES	CURRENT \$/HOUR	TRANSFORMATION
WAGE35	154 H	COMPENSATION PER MANHR, MFG, DUR, PAPER & PRODUCTS	CURRENT \$/HOUR	TRANSFORMATION
WAGE36	154 H	COMPENSATION PER MANHR, MFG, DUR, PRINTING & PUBLISHING	CURRENT \$/HOUR	TRANSFORMATION
WAGE37	154 H	COMPENSATION PER MANHR, MFG, DUR, CHEMICALS & PRODUCTS	CURRENT \$/HOUR	TRANSFORMATION
WAGE38	154 H	COMPENSATION PER MANHR, MFG, DUR, PETROLEUM & COAL PROD	CURRENT \$/HOUR	TRANSFORMATION
WAGE39	154 H	COMPENSATION PER MANHR, MFG, DUR, RUBBER & PLASTICS PROD	CURRENT \$/HOUR	TRANSFORMATION
WAGE40	154 H	COMPENSATION PER MANHR, MFG, DUR, LEATHER & PRODUCTS	CURRENT \$/HOUR	TRANSFORMATION
WAGE41	154 H	COMPENSATION PER MANHR, MFG, DUR, MINING	CURRENT \$/HOUR	TRANSFORMATION
WAGE42	154 H	COMPENSATION PER MANHR, MFG, DUR, COMMUNICATIONS	CURRENT \$/HOUR	TRANSFORMATION
WAGE43	154 H	COMPENSATION PER MANHR, MFG, DUR, TRANSPORTATION	CURRENT \$/HOUR	TRANSFORMATION
WAGE44	154 H	COMPENSATION PER EMPLOYEE PER WK, REG, ELECTRIC, GAS & SANITARY	CURRENT \$/WEEK	TRANSFORMATION
WAGE45	154 H	CONSTANT & GDP, AGRICULTURE, FORESTRY & FISHERIES, TOTAL	HILL CURRENT \$	HEA WORKFILE
WAGE46	154 H	GROSS PRODUCT ORIGINATING: CONTRACT CONSTRUCTION	HILL CURRENT \$	HEA WORKFILE
WAGE47	154 H	GROSS PRODUCT ORIGINATING: COMMERCIAL (CC + FI + SV + WP)	HILL CURRENT \$	TRANSFORMATION
WAGE48	154 H	GROSS PRODUCT ORIGINATING: COMMERCIAL (CC + FI + SV + WP)	HILL CURRENT \$	TRANSFORMATION
WAGE49	154 H	GROSS PRODUCT ORIGINATING: COMMERCIAL & OTHER-INCL REST OF WORLD	HILL CURRENT \$	TRANSFORMATION
WAGE50	154 H	GROSS PRODUCT ORIGINATING: COMMERCIAL & OTHER-INCL REST OF WORLD	HILL CURRENT \$	TRANSFORMATION
WAGE51	154 H	GROSS PRODUCT ORIGINATING: FINANCE, INSURANCE & REAL ESTATE	HILL CURRENT \$	TRANSFORMATION
WAGE52	154 H	GROSS PRODUCT ORIGINATING: FIN, INS & REAL ESTATE FINANCE & INSURANCE	HILL CURRENT \$	TRANSFORMATION
WAGE53	154 H	CONSTANT & GDP, GOVERNMENT AND GOVERNMENT ENTERPRISES, TOTAL	HILL CURRENT \$	HEA WORKFILE
WAGE54	154 H	CONSTANT & GDP, GOVERNMENT AND GOVERNMENT ENTERPRISES, TOTAL	HILL CURRENT \$	HEA WORKFILE
WAGE55	154 H	CONSTANT & GDP, GOVERNMENT, FEDERAL, ENTERPRISE	HILL CURRENT \$	HEA WORKFILE
WAGE56	154 H	GROSS PRODUCT ORIGINATING: GOVT & GOVT ENTST, ST & LOCAL, ENTERPRISES	HILL CURRENT \$	HEA WORKFILE
WAGE57	154 H	VALUE ADDED, ST & LOCAL, GOVT ENTST, ST & LOCAL, ENTERPRISES	HILL CURRENT \$	HEA WORKFILE
WAGE58	154 H	CONSTANT & GDP, MANUFACTURING, TOTAL	HILL CURRENT \$	HEA WORKFILE
WAGE59	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE60	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE61	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE62	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE63	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE64	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE65	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE66	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE67	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE68	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE69	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE70	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE71	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE72	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE73	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE74	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE75	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE76	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE77	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE78	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE79	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE80	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE81	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE82	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE83	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE84	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE85	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE86	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE87	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE88	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE89	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE90	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE91	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE92	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE93	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE94	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE95	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE96	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE97	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE98	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE99	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE
WAGE100	154 H	CONSTANT & GDP, MANUFACTURING, DURABLE GOODS	HILL CURRENT \$	HEA WORKFILE



# THE CLASSIFICATION AND MODEL VARIATION FOR INDUSTRIAL PRODUCTS

VARIABLE	NUMBER	TYPE	DESCRIPTION	UNITS	SOURCE
AVG1025	18	W	GROSS PRODUCT ORIG: MFG, DURABLES: FURNITURE AND FIXTURES	BILL CONSTANT \$	REA WORKFILE
AVG1025	277	I	VALUE ADDED, /Z: IAT: MFG, DUR: FURNITURE & FIXTURES	BILL CURRENT \$	REA WORKFILE
AVG1025	19	W	CONSTANT \$ GP: MFG, DUR: STONE, CLAY & GLASS	BILL CONSTANT \$	REA WORKFILE
AVG1025	278	I	CURRENT \$ GP: MFG, DUR: STONE, CLAY & GLASS	BILL CURRENT \$	REA WORKFILE
AVG1025	20	W	GROSS PRODUCT ORIG: MFG, DURABLES: PRIMARY METAL INDUSTRIES	BILL CONSTANT \$	REA WORKFILE
AVG1025	279	I	VALUE ADDED, /Z: IAT: MFG, DUR: PRIMARY METALS	BILL CURRENT \$	REA WORKFILE
AVG1025	21	W	GROSS PRODUCT ORIG: MFG, DURABLES: FABRICATED METAL PRODUCTS	BILL CONSTANT \$	REA WORKFILE
AVG1025	280	I	VALUE ADDED, /Z: IAT: MFG, DUR: FABRICATED METAL PRODUCTS	BILL CURRENT \$	REA WORKFILE
AVG1025	22	W	CONSTANT \$ GP: MFG, DUR: MACHINERY, EXCEPT ELECTRICAL	BILL CONSTANT \$	REA WORKFILE
AVG1025	281	I	CURRENT \$ GP: MFG, DUR: MACHINERY, EXCEPT ELECTRICAL	BILL CURRENT \$	REA WORKFILE
AVG1025	23	W	OUTPUT, ELECTRICAL MACHINERY	BILL CONSTANT \$	REA WORKFILE
AVG1025	282	I	VALUE ADDED, /Z: IAT: MFG, DUR: ELECTRICAL MACHINERY	BILL CURRENT \$	REA WORKFILE
AVG1025	24	W	GROSS PRODUCT ORIG: MFG, DUR: NONAUTO TRANS: EXORDINANCE=372,9+19	BILL CONSTANT \$	REA WORKFILE
AVG1025	283	I	VALUE ADDED, /Z: IAT: MFG, DUR: NONAUTO TRANS: EXORDINANCE	BILL CURRENT \$	REA WORKFILE
AVG1025	265	I	GROSS PROD ORIG: MFG, DUR: NONAUTO TRANS: ORD+MISC MF=372,9+19+39	BILL CONSTANT \$	TRANSFORMATION
AVG1025	284	I	GROSS PROD ORIG: MFG, DUR: NONAUTO TRANS: ORD+MISC MF=372,9+19+39	BILL CURRENT \$	TRANSFORMATION
AVG1025	25	W	CONSTANT \$ GP: MFG, DUR: MOTOR VEHICLES & EQUIP.	BILL CONSTANT \$	REA WORKFILE
AVG1025	285	I	CURRENT \$ GP: MFG, DUR: MOTOR VEHICLES & EQUIP.	BILL CURRENT \$	REA WORKFILE
AVG1025	26	W	GROSS PRODUCT ORIG: MFG, DURABLES: INSTRUMENTS & PRODUCTS	BILL CONSTANT \$	REA WORKFILE
AVG1025	286	I	VALUE ADDED, /Z: IAT: MFG, DUR: INSTRUMENTS & PRODUCTS	BILL CURRENT \$	REA WORKFILE
AVG1025	27	W	CONSTANT \$ GP: MFG, DUR: MISCELLANEOUS MFG.	BILL CONSTANT \$	REA WORKFILE
AVG1025	287	I	CURRENT \$ GP: MFG, DUR: MISCELLANEOUS MFG.	BILL CURRENT \$	REA WORKFILE
AVG1025	1002	I	CONSTANT \$ GP: MANUFACTURING, NONDURABLE GOODS	BILL CONSTANT \$	REA WORKFILE
AVG1025	120	I	CURRENT \$ GP: MANUFACTURING, NONDURABLE GOODS	BILL CURRENT \$	REA WORKFILE
AVG1025	290	I	CONSTANT \$ GP: MFG, DUR: FOOD & KINDRED PRODUCTS	BILL CONSTANT \$	REA WORKFILE
AVG1025	266	I	CURRENT \$ GP: MFG, DUR: FOOD & KINDRED PRODUCTS	BILL CURRENT \$	REA WORKFILE
AVG1025	267	I	CONSTANT \$ GP: MFG, DUR: TOBACCO	BILL CONSTANT \$	REA WORKFILE
AVG1025	268	I	CURRENT \$ GP: MFG, DUR: TOBACCO	BILL CURRENT \$	REA WORKFILE
AVG1025	269	I	CONSTANT \$ GP: MFG, DUR: TEXTILE MILL PRODUCTS	BILL CONSTANT \$	REA WORKFILE
AVG1025	270	I	CURRENT \$ GP: MFG, DUR: TEXTILE MILL PRODUCTS	BILL CURRENT \$	REA WORKFILE
AVG1025	271	I	CONSTANT \$ GP: MFG, DUR: APPAREL & RELATED PRODUCTS	BILL CONSTANT \$	REA WORKFILE
AVG1025	272	I	CURRENT \$ GP: MFG, DUR: APPAREL & RELATED PRODUCTS	BILL CURRENT \$	REA WORKFILE
AVG1025	273	I	CONSTANT \$ GP: MFG, DUR: PAPER & ALLIED PRODUCTS	BILL CONSTANT \$	REA WORKFILE
AVG1025	274	I	CURRENT \$ GP: MFG, DUR: PAPER & ALLIED PRODUCTS	BILL CURRENT \$	REA WORKFILE
AVG1025	275	I	CONSTANT \$ GP: MFG, DUR: PRINTING & PUBLISHING	BILL CONSTANT \$	REA WORKFILE
AVG1025	276	I	CURRENT \$ GP: MFG, DUR: PRINTING & PUBLISHING	BILL CURRENT \$	REA WORKFILE
AVG1025	277	I	CONSTANT \$ GP: MFG, DUR: CHEMICALS & ALLIED PRODUCTS	BILL CONSTANT \$	REA WORKFILE
AVG1025	278	I	CURRENT \$ GP: MFG, DUR: CHEMICALS & ALLIED PRODUCTS	BILL CURRENT \$	REA WORKFILE
AVG1025	279	I	CONSTANT \$ GP: MFG, DUR: PETROLEUM & RELATED INDUSTRIES	BILL CONSTANT \$	REA WORKFILE
AVG1025	280	I	CURRENT \$ GP: MFG, DUR: PETROLEUM & RELATED INDUSTRIES	BILL CURRENT \$	REA WORKFILE
AVG1025	281	I	CONSTANT \$ GP: MFG, DUR: RUBBER & MISC PLASTICS PRODUCTS	BILL CONSTANT \$	REA WORKFILE
AVG1025	282	I	CURRENT \$ GP: MFG, DUR: RUBBER & MISC PLASTICS PRODUCTS	BILL CURRENT \$	REA WORKFILE
AVG1025	283	I	CONSTANT \$ GP: MFG, DUR: LEATHER & LEATHER PRODUCTS	BILL CONSTANT \$	REA WORKFILE
AVG1025	284	I	CURRENT \$ GP: MFG, DUR: LEATHER & LEATHER PRODUCTS	BILL CURRENT \$	REA WORKFILE
AVG1025	285	I	CONSTANT \$ GP: TOTAL MANUFACTURING	BILL CONSTANT \$	TRANSFORMATION
AVG1025	286	I	CURRENT \$ GP: TOTAL MANUFACTURING	BILL CURRENT \$	TRANSFORMATION
AVG1025	287	I	CONSTANT \$ GP: TOTAL MANUFACTURING	BILL CONSTANT \$	TRANSFORMATION
AVG1025	288	I	CURRENT \$ GP: TOTAL MANUFACTURING	BILL CURRENT \$	TRANSFORMATION
AVG1025	289	I	CONSTANT \$ GP: TOTAL MANUFACTURING	BILL CONSTANT \$	TRANSFORMATION
AVG1025	290	I	CURRENT \$ GP: TOTAL MANUFACTURING	BILL CURRENT \$	TRANSFORMATION

# THE GLOSSARY OF MODEL VARIABLES FOR THE HARTMAN ANNUAL AND INDUSTRY MODEL

VARIABLE	NUMBER	TYPE	DESCRIPTION	UNITS	SOURCE
XVGR11+12	3	M	CONSTANT \$ GROSS MINING COAL	BILL CONSTANT \$	HEA WORKFILE
XVGR13	4	M	CONSTANT \$ GROSS MINING CRUDE PETROLEUM & NATURAL GAS	BILL CONSTANT \$	HEA WORKFILE
XVGR14	5	M	CONSTANT \$ GROSS MINING NONMETALLIC MINERALS	BILL CONSTANT \$	HEA WORKFILE
XVGR15	6	M	CONSTANT \$ GROSS MINING ALL MINERALS	BILL CONSTANT \$	HEA WORKFILE
XVGR16	7	M	GROSS PRODUCT ORIG DUMMY INDUSTRY INVENTORY VALUATION ADJ	BILL CONSTANT \$	BY DEFINITION=0
XVGR17	8	M	GROSS PRODUCT ORIG DUMMY INDUSTRY IMPORTS OF GOODS & SERVICES	BILL CONSTANT \$	BY DEFINITION=0
XVGR18	9	M	CONSTANT \$ GROSS COMMUNICATIONS, TOTAL	BILL CONSTANT \$	HEA WORKFILE
XVGR19	10	M	CURRENT \$ GROSS COMMUNICATIONS, TOTAL	BILL CURRENT \$	HEA WORKFILE
XVGR20	11	M	CONSTANT \$ GROSS TRANSPORTATION, TOTAL	BILL CONSTANT \$	HEA WORKFILE
XVGR21	12	M	CURRENT \$ GROSS TRANSPORTATION, TOTAL	BILL CURRENT \$	HEA WORKFILE
XVGR22	13	M	CONSTANT \$ GROSS TRANSPORTATION, RAILROADS	BILL CONSTANT \$	HEA WORKFILE
XVGR23	14	M	CONSTANT \$ GROSS TRANSPORTATION, LOCAL & HIGHWAY PASSENGER	BILL CONSTANT \$	HEA WORKFILE
XVGR24	15	M	CONSTANT \$ GROSS TRANSPORTATION, MOTOR FREIGHT & WAREHOUSING	BILL CONSTANT \$	HEA WORKFILE
XVGR25	16	M	CONSTANT \$ GROSS TRANSPORTATION, WATER	BILL CONSTANT \$	HEA WORKFILE
XVGR26	17	M	CONSTANT \$ GROSS TRANSPORTATION, AIR	BILL CONSTANT \$	HEA WORKFILE
XVGR27	18	M	CONSTANT \$ GROSS TRANSPORTATION, PIPELINES, EXC, NATURAL GAS	BILL CONSTANT \$	HEA WORKFILE
XVGR28	19	M	CONSTANT \$ GROSS TRANSPORTATION, TRANSPORTATION SERVICES	BILL CONSTANT \$	HEA WORKFILE
XVGR29	20	M	CONSTANT \$ GROSS ELECTRIC, GAS & SANITARY SERVICES	BILL CONSTANT \$	HEA WORKFILE
XVGR30	21	M	CURRENT \$ GROSS ELECTRIC, GAS & SANITARY SERVICES	BILL CURRENT \$	HEA WORKFILE
XVGR31	22	M	GROSS PRODUCT ORIGINATING REST OF THE WORLD	BILL CONSTANT \$	HEA WORKFILE
XVGR32	23	M	CONSTANT \$ GROSS ALL INDUSTRIES, TOTAL	BILL CONSTANT \$	HEA WORKFILE
XVGR33	24	M	CURRENT \$ GROSS ALL INDUSTRIES, TOTAL	BILL CURRENT \$	HEA WORKFILE
XVGR34	25	M	CONSTANT \$ GROSS SERVICES, TOTAL	BILL CONSTANT \$	HEA WORKFILE
XVGR35	26	M	CONSTANT \$ GROSS WHOLESALE & RETAIL TRADE, TOTAL	BILL CONSTANT \$	HEA WORKFILE
XVGR36	27	M	GROSS PRODUCT ORIGINATING WHOLESALE & RETAIL TRADE, RETAIL	BILL CONSTANT \$	HEA WORKFILE
XVGR37	28	M	GROSS PRODUCT ORIGINATING WHOLESALE & RETAIL TRADE, WHOLESALE	BILL CONSTANT \$	HEA WORKFILE
XVGR38	29	M	DIVIDEND INCOME, TOTAL	BILL CURRENT \$	SCH 1.13
XVGR39	30	M	PROPRIETORS' INCOME, FARM, WITH IVA & CAPITAL CONSUMPTION ADJ	BILL CURRENT \$	SCH 1.13
XVGR40	31	M	INTEREST PAID BY CONSUMERS	BILL CURRENT \$	SCH 2.1
XVGR41	32	M	INTEREST PAID, BY GOVERNMENT (NET) AND CONSUMERS	BILL CURRENT \$	TRANSFORMATION
XVGR42	33	M	FED GOVT EXPEND, INTEREST PAID, NET, TOTAL	BILL CURRENT \$	SCH 3.2
XVGR43	34	M	FED GOVT EXPEND, INTEREST PAID, TO FOREIGNERS	BILL CURRENT \$	SCH 3.2
XVGR44	35	M	STRATEGIC GOVT EXPENDITURES, INTEREST PAID, NET, TOTAL	BILL CURRENT \$	SCH 3.4
XVGR45	36	M	NATIONAL INCOME, WITH CAPITAL CONSUMPTION ADJUSTMENTS	BILL CURRENT \$	SCH 1.10
XVGR46	37	M	NATIONAL INCOME, WITH CAPITAL CONSUMPTION ADJUSTMENTS	BILL CURRENT \$	SCH 1.13
XVGR47	38	M	PERSONAL INCOME, DISPROFIT, WITHOUT IVA & CCA ADJUSTMENTS	BILL CURRENT \$	TRANSFORMATION
XVGR48	39	M	PERSONAL INCOME, TOTAL	BILL CURRENT \$	SCH 2.1
XVGR49	40	M	DISPOSABLE PERSONAL INCOME	BILL CURRENT \$	SCH 2.1
XVGR50	41	M	DISPOSABLE PERSONAL INCOME	CONSTANT \$	SCH 2.1
XVGR51	42	M	DISPOSABLE PERSONAL INCOME, EXCLUDING IMPUTATIONS	BILL CURRENT \$	TRANSFORMATION
XVGR52	43	M	DISPOSABLE PERSONAL INCOME, EXCLUDING IMPUTATIONS	BILL CURRENT \$	SCH 2.1
XVGR53	44	M	PERSONAL INCOME, TOTAL	BILL CURRENT \$	SCH 2.1
XVGR54	45	M	PERSONAL INCOME, PER CAPITA	BILL CURRENT \$	SCH 2.1
XVGR55	46	M	SAVINGS RATE, PERSONAL	PERCENT	SCH 2.1
XVGR56	47	M	TAXABLE INCOME, CCA	PERCENT	SCH 2.1
XVGR57	48	M	CANADA, INDEX OF INDUSTRIAL PRODUCTION, TOTAL	1972 = 100	TRANSFORMATION
XVGR58	49	M	CANADA, CONSUMER PRICE INDEX	1972 = 100	TRANSFORMATION
XVGR59	50	M	FRANCE, INDEX OF INDUSTRIAL PRODUCTION, TOTAL	1972 = 100	TRANSFORMATION

VARIABLE	COUNTRY TYPE	DESCRIPTION	UNIT	SOURCE
ZGAPC	A30 F	PRICE, CONSUMER PRICE INDEX	1972 = 100.	TRANSFORMATION
ZGAPD	A15 F	GERMANY, INDEX OF INDUSTRIAL PRODUCTION, TOTAL	1972 = 100.	TRANSFORMATION
ZGAPF	A31 F	GERMANY, CONSUMER PRICE INDEX	1972 = 100.	TRANSFORMATION
ZGAPG	A16 F	ITALY, INDEX OF INDUSTRIAL PRODUCTION, TOTAL	1972 = 100.	TRANSFORMATION
ZGAPH	A32 F	ITALY, CONSUMER PRICE INDEX	1972 = 100.	TRANSFORMATION
ZGAPJ	A18 F	JAPAN, INDEX OF INDUSTRIAL PRODUCTION, TOTAL	1972 = 100.	TRANSFORMATION
ZGAPK	A33 F	JAPAN, CONSUMER PRICE INDEX	1972 = 100.	TRANSFORMATION
ZGAPL	A19 F	MEXICO, INDEX OF INDUSTRIAL PRODUCTION, TOTAL	1972 = 100.	TRANSFORMATION
ZGAPM	A34 F	MEXICO, CONSUMER PRICE INDEX	1972 = 100.	TRANSFORMATION
ZGAPN	A20 F	INDEX, EUROPEAN FREIGHT RATES, TRAMP VOYAGE	1972 = 100.	TRANSFORMATION
ZGAPQ	A17 F	UNITED KINGDOM, INDEX OF INDUSTRIAL PRODUCTION, TOTAL	1972 = 100.	TRANSFORMATION
ZGAPR	A33 F	UNITED KINGDOM, CONSUMER PRICE INDEX	1972 = 100.	TRANSFORMATION
ZGAPT	A27 F	WEIGHTED AVERAGE, INDUSTRIAL PRODUCTION INDEX IN 7 COUNTRIES	1972 = 100.	TRANSFORMATION
ZGAPU	A28 F	WTO AVERAGE, CPI IN 7 COUNTRIES, ADJ FOR EXCHG RATES (TRAVEL WT)	1972 = 100.	TRANSFORMATION

APPENDIX III

WHARTON ANNUAL MODEL

CONTROL SOLUTION



TABLE 1.00 SELECTED INDICATORS

LINE VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 GNPS	I GROSS NATIONAL PRODUCT (CUR \$)	2105.7	2108.1	2492.2	2754.9	3044.6	3335.5	3628.3	3975.3	4328.6	4682.8	5031.3
2 GNPS	% CHANGE	11.6	9.6	8.0	10.5	10.5	9.6	8.8	9.6	8.9	8.2	7.4
3												
4 GNP	I GROSS NATIONAL PRODUCT (72 \$)	1389.2	1416.7	1438.5	1487.2	1540.4	1585.7	1626.5	1684.4	1740.5	1791.5	1835.8
5 GNP	% CHANGE	3.9	2.3	1.5	3.4	3.6	2.9	2.6	3.6	3.3	2.9	2.5
6												
7 PDGNP	I GROSS NAT. PROD. DEFL. (1972=100.0)	152.1	162.9	173.2	185.2	197.7	210.4	223.1	236.0	248.7	261.4	274.1
8 PDGNP	% CHANGE	7.4	7.1	6.3	6.9	6.7	6.4	6.0	5.8	5.4	5.1	4.8
9												
10 NPT	I POPULATION (MILLIONS)	218.5	220.3	222.2	224.2	226.4	228.6	230.7	232.9	235.1	237.3	239.4
11 NPT	% CHANGE	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.9
12												
13 NLC	I LABOR FORCE (MILLIONS)	100.3	102.7	104.8	106.4	107.9	109.5	110.9	112.2	113.6	115.1	116.5
14 NLC	% CHANGE	3.0	2.4	2.0	1.5	1.4	1.4	1.3	1.2	1.3	1.3	1.2
15												
16 NALT	I PARTICIPATION RATE	63.0	63.6	64.0	64.1	64.3	64.5	64.7	64.9	65.1	65.3	65.5
17 NALT	% CHANGE	1.3	0.9	0.6	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4
18												
19 NEMT	I EMPLOYMENT (MILLIONS)	94.2	96.3	97.7	99.6	101.4	102.9	104.3	105.8	107.5	109.1	110.4
20 NEMT	% CHANGE	4.1	2.3	1.4	2.0	1.8	1.5	1.4	1.5	1.5	1.5	1.3
21												
22 WRCS	I WAGE RATE PER WEEK, ALL INDUSTRIES	265.1	286.1	306.2	330.2	355.7	382.6	410.5	440.6	471.5	503.4	536.7
23 WRCS	% CHANGE	8.2	7.9	7.0	7.8	7.7	7.6	7.3	7.3	7.0	6.8	6.6
24												
25 GNPP	I PRODUCTIVITY - ALL INDUSTRIES	14.6	14.6	14.7	14.9	15.1	15.4	15.9	16.1	16.4	16.7	17.0
26 GNPP	% CHANGE	-0.2	0.1	0.1	1.4	1.8	1.4	1.2	2.0	1.8	1.4	1.2
27												
28 XVGMEPP	I PRODUCTIVITY - ALL MANUFACTURING	8.0	8.2	8.3	8.5	8.7	8.9	9.1	9.3	9.5	9.7	10.0
29 XVGMEPP	% CHANGE	2.5	2.1	1.9	3.2	3.4	2.6	2.4	3.1	2.8	2.5	2.4
30												
31 GNPPC	I REAL PER CAPITA GNP (THOU 72 \$)	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3
32 GNPPC	% CHANGE	3.0	1.5	0.7	2.4	2.6	2.0	1.6	2.6	2.4	2.0	1.6
33												
34 YPD/NPT	I REAL PER CAP DISP INC (THOU 172 \$)	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0
35 YPD/NPT	% CHANGE	3.3	2.4	1.7	1.8	2.0	1.7	1.6	2.1	2.2	2.0	1.7
36												
37 CPURTS	I CORPORATE PROFITS BEFORE TAXES	202.6	212.1	223.6	235.8	248.1	260.4	272.7	285.0	297.3	309.6	321.9
38 CPURTS	% CHANGE	16.5	4.7	5.4	18.9	14.1	9.8	6.3	13.0	10.1	7.3	5.6
39												
40 FRMCS	B BOND RATE (%)	9.06	9.79	9.64	9.75	9.91	9.31	9.04	8.78	8.56	8.35	8.10
41 FRMCPH	B PRIME COMMERCIAL PAPER RATE (%)	8.10	10.01	8.63	8.71	8.16	7.73	7.23	7.18	7.02	6.89	6.85
42 FM43	I MONEY SUPPLY	976.2	1061.3	1150.0	1273.3	1407.1	1557.8	1711.2	1871.5	2042.0	2215.8	2386.3
43 FM43	% CHANGE	10.8	8.7	8.4	10.7	10.5	10.7	9.8	9.4	9.1	8.5	7.8
44												
45 UNUT	I UNEMPLOYMENT RATE (%)	6.05	6.19	6.78	6.18	6.08	5.99	5.91	5.69	5.43	5.28	5.20
46 YPDSAVR	B SAVINGS RATE (%)	5.43	6.04	6.53	6.33	6.44	6.41	6.37	6.51	6.60	6.56	6.49
47												
48 GVSINPFS	I SURPLUS OR DEFICIT, FEDERAL (CUR \$)	-31.0	-40.6	-64.5	-56.5	-43.9	-37.2	-34.1	-22.2	-11.2	-4.4	-11.4
49 GVSINPSS	I SURPLUS OR DEF, STATE & LOC (CUR \$)	27.1	22.9	23.2	24.8	26.2	28.4	29.4	31.8	32.3	31.4	33.6
50												
51 WRCS/YNS	COMPEN. TO EMPLOYEES TO NAT. INCOME	76.4	76.8	77.3	76.6	75.8	75.6	75.7	75.1	74.8	74.9	75.3
52 CPURTS/YNS	PROFITS TO NATIONAL INCOME	11.9	11.4	11.1	11.9	12.3	12.3	12.0	12.4	12.5	12.4	12.2

A PRODUCT OF WHARTON FFA, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

TABLE 2.00 GROSS NATIONAL PRODUCT (CURRENT AND 725)

LINE VAR LABEL	I	T	F	M	1979	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1															
2															
3															
4 GNPS	I				2105.7	21308.1	2492.2	2754.9	3044.6	3335.5	3628.1	3975.3	4328.6	4682.8	5031.3
5 GNPS	I				X CHANGE	11.6	9.6	8.0	10.5	9.6	8.8	9.6	8.9	8.2	7.4
6															
7 CES	I				1336.5	1405.4	1592.2	1752.1	1920.7	2096.1	2277.3	2477.3	2683.9	2898.7	3114.7
8 CES	I				X CHANGE	10.8	9.6	8.7	10.0	9.6	8.6	8.8	8.3	8.0	7.5
9															
10 CEDS	I				195.8	200.7	225.1	247.3	269.4	290.5	311.6	330.4	365.0	391.5	415.0
11 CEDS	I				X CHANGE	9.8	7.1	7.3	9.8	9.0	7.8	7.3	7.9	7.2	6.0
12															
13 CENS	I				523.9	572.1	616.3	670.9	726.4	783.7	841.8	905.3	971.1	1038.7	1106.0
14 CENS	I				X CHANGE	9.4	9.2	7.7	8.9	8.3	7.9	7.4	7.3	7.0	6.8
15															
16 CESS	I				616.8	683.6	750.8	833.9	924.9	1022.1	1124.0	1233.6	1347.8	1468.4	1593.7
17 CESS	I				X CHANGE	12.3	10.8	9.8	11.1	10.9	10.5	9.8	9.3	9.0	8.5
18															
19 IATS	I				345.7	361.9	377.0	436.7	507.1	563.6	619.4	701.9	779.6	845.9	899.0
20 IATS	I				X CHANGE	16.1	4.7	4.2	15.8	16.1	11.1	9.9	13.3	11.1	8.5
21															
22 IAFS	I				320.7	350.7	368.3	420.9	483.8	537.1	589.8	666.0	739.0	802.5	855.0
23 IAFS	I				X CHANGE	16.5	6.7	5.0	14.3	15.0	11.0	9.8	12.9	11.0	8.6
24															
25 IAFNS	I				222.4	247.4	261.7	295.3	332.0	369.7	409.2	453.7	502.0	553.1	604.1
26 IAFNS	I				X CHANGE	16.8	11.3	5.8	12.8	12.4	11.4	10.7	10.9	10.7	9.2
27															
28 IAFRS	I				106.1	103.3	106.6	125.6	151.8	167.4	180.4	212.3	237.0	249.4	251.0
29 IAFRS	I				X CHANGE	15.7	-2.9	3.2	17.8	20.9	10.3	7.9	17.5	11.6	5.2
30															
31 IBITS	H				17.0	11.2	8.7	15.8	23.3	26.5	29.6	35.9	40.6	43.4	43.9
32															
33 TABS	I				-9.9	6.1	11.8	6.8	4.8	7.0	2.0	2.0	3.5	3.5	3.0
34															
35 TEHS	I				206.4	253.0	281.7	311.7	344.8	380.0	413.3	459.6	510.4	562.6	615.3
36 TEHS	I				X CHANGE	17.6	22.6	11.4	10.6	10.6	10.2	8.8	11.2	11.0	10.2
37															
38 TMBS	I				216.3	246.9	269.9	304.9	340.0	373.0	411.4	457.6	506.9	559.1	611.5
39 TMBS	I				X CHANGE	15.9	14.2	9.3	13.0	11.5	9.7	10.3	11.2	10.8	10.3
40															
41 CVPTS	I				433.4	474.7	511.2	559.3	612.0	668.6	724.4	794.0	861.6	934.8	1013.9
42 CVPTS	I				X CHANGE	10.0	9.5	7.7	9.4	9.4	9.2	9.1	8.9	8.5	8.5
43															
44 GVPFS	I				153.3	167.8	180.9	197.7	215.3	233.6	252.7	272.5	293.0	314.8	337.5
45 GVPFS	I				X CHANGE	5.7	9.5	7.8	9.3	8.9	8.5	8.2	7.8	7.5	7.2
46															
47 GVPSS	I				280.1	306.9	330.3	361.6	396.7	435.0	476.7	521.5	568.7	620.0	676.4
48 GVPSS	I				X CHANGE	12.5	9.6	7.6	9.5	9.7	9.6	9.6	9.4	9.0	9.1

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

TABLE 2.00 GROSS NATIONAL PRODUCT (CURRENT AND 72s)

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1											
2											
3											
4 GNP	1384.2	1416.7	1438.5	1487.2	1540.4	1585.7	1626.5	1684.4	1740.5	1791.5	1835.8
5 GNP	1.9	2.3	1.5	3.4	3.6	2.9	2.6	3.6	3.3	2.9	2.5
6											
7 CE	888.9	910.9	929.1	957.3	985.6	1013.2	1040.6	1075.6	1107.4	1141.0	1172.6
8 CE	1.6	2.5	2.0	3.0	3.0	2.8	2.7	3.2	3.1	3.0	2.8
9											
10 CED	143.3	144.7	147.4	153.0	158.8	163.6	168.1	175.3	182.1	188.1	192.4
11 CED	4.0	1.0	1.9	3.8	3.8	3.0	2.8	4.3	3.9	3.3	2.3
12											
13 CEN	337.9	346.7	353.1	362.8	371.0	378.9	386.4	395.6	405.4	415.5	425.3
14 CEN	2.3	2.6	1.8	2.7	2.2	2.1	2.0	2.4	2.5	2.5	2.3
15											
16 CES	407.6	419.4	428.5	441.4	455.8	470.7	486.0	502.7	519.9	537.3	554.9
17 CES	4.7	2.9	2.2	3.0	3.2	3.3	3.2	3.4	3.4	3.4	3.3
18											
19 IAT	210.8	202.7	196.4	210.9	227.8	236.8	244.3	260.6	273.7	281.8	284.8
20 IAT	7.4	-3.8	-3.1	7.4	8.0	3.9	3.2	6.7	5.0	3.0	1.0
21											
22 IAF	199.6	196.0	191.5	202.2	215.6	223.5	230.2	244.2	256.0	263.7	267.1
23 IAF	6.5	-1.8	-2.3	5.6	6.6	3.7	3.0	6.1	4.8	3.0	1.3
24											
25 IAFH	140.1	144.5	143.3	150.0	157.2	163.7	170.0	177.6	185.9	194.0	200.8
26 IAFH	7.9	3.2	-0.8	4.7	4.8	4.2	3.8	4.5	4.6	4.3	3.5
27											
28 IAFR	59.5	51.5	48.2	52.2	58.4	59.8	60.2	66.6	70.1	69.7	66.3
29 IAFR	3.2	-13.5	-6.5	8.4	12.0	2.4	0.7	10.5	5.3	-0.6	-4.8
30											
31 IAIT	11.1	6.7	4.9	8.7	12.2	13.2	14.1	16.3	17.7	18.2	17.6
32											
33 THB	9.7	21.1	26.7	25.8	25.8	26.4	23.6	23.2	23.4	23.3	23.4
34											
35 TEB	108.3	125.3	132.7	138.2	144.1	149.7	154.1	162.7	172.1	181.2	189.7
36 TEB	10.2	15.8	5.9	4.2	4.2	3.9	2.9	5.5	5.8	5.3	4.7
37											
38 TMB	98.6	104.2	106.0	112.5	118.3	123.3	130.6	139.5	148.7	157.9	166.3
39 TMB	11.1	5.8	1.7	6.1	5.1	4.2	5.9	6.8	6.6	6.2	5.3
40											
41 GVPT	274.9	282.1	286.3	293.3	301.2	309.3	318.1	327.0	336.1	345.4	355.0
42 GVPT	2.1	2.6	1.5	2.4	2.7	2.7	2.8	2.8	2.8	2.8	2.8
43											
44 GVPF	100.1	102.9	104.7	107.0	109.4	111.8	114.3	116.8	119.4	122.1	124.8
45 GVPF	-1.5	2.9	1.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
46											
47 GVPS	174.8	179.1	181.6	186.3	191.8	197.5	203.8	210.2	216.6	223.3	230.3
48 GVPS	4.3	2.5	1.4	2.6	3.0	3.0	3.2	3.1	3.1	3.1	3.1

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 3.10 PERSONAL CONSUMPTION EXPENDITURES

LINE VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	-----CURRENT DOLLARS-----											
2												
3	I PERSONAL CONSUMPTION EXPENDITURES	1336.5	1465.4	1592.2	1752.1	1920.7	2096.3	2277.5	2477.3	2681.9	2898.7	3114.7
4												
5	I DURABLE GOODS	195.8	209.7	225.1	247.3	269.4	290.5	311.6	338.4	365.0	391.5	415.0
6	I AUTOS AND PARTS	89.1	92.0	98.8	110.2	120.6	129.3	136.9	148.8	160.7	172.6	182.1
7	I FURNITURE AND HOUSEHOLD EQUIP.	77.1	84.3	89.9	97.3	105.7	114.7	124.8	135.8	146.4	156.7	166.5
8	I OTHER DURABLE GOODS	29.6	33.4	36.4	39.8	43.1	46.4	49.9	53.8	57.9	62.2	66.4
9												
10	I NONDURABLE GOODS	521.9	572.1	616.1	670.9	726.4	783.8	841.8	905.3	971.1	1038.7	1106.0
11	I FOOD AND BEVERAGES	268.9	290.0	308.8	334.9	362.2	390.7	419.9	451.3	483.3	515.9	548.6
12	I CLOTHING AND SHOES	80.1	96.6	104.5	113.8	123.3	132.0	142.8	153.3	164.1	175.1	186.1
13	I GASOLINE AND OIL	50.3	56.6	62.7	68.7	73.6	77.9	81.6	85.2	89.1	93.2	97.1
14	I OTHER NONDURABLE GOODS	116.6	128.9	140.4	153.5	167.3	182.2	197.6	215.5	234.6	254.5	274.2
15												
16	I SERVICES	616.8	683.6	750.8	833.9	924.9	1022.1	1124.0	1233.6	1347.8	1468.4	1593.7
17	I HOUSING	207.0	230.7	252.8	278.2	308.0	340.2	373.2	407.4	442.2	478.1	515.1
18	I HOUSEHOLD OPERATION SERVICES	91.9	101.1	110.0	121.0	132.0	143.7	156.0	169.3	182.7	196.5	210.6
19	I TRANSPORTATION SERVICES	52.7	59.3	65.0	72.2	79.7	87.8	96.1	104.9	114.4	124.7	135.0
20	I OTHER SERVICES	265.1	292.5	323.0	362.5	405.2	450.5	498.6	552.0	608.5	669.1	733.0
21												
22	-----CONSTANT 72 DOLLARS-----											
23												
24	I PERSONAL CONSUMPTION EXPENDITURES	888.9	910.9	929.1	957.3	985.6	1013.2	1040.6	1073.6	1107.4	1141.0	1172.6
25												
26	I DURABLE GOODS	143.3	144.7	147.4	153.0	158.8	163.6	168.1	175.3	182.1	188.1	192.4
27	I AUTOS AND PARTS	61.1	58.1	58.1	61.2	64.0	65.4	66.0	68.6	71.0	72.9	73.5
28	I FURNITURE AND HOUSEHOLD EQUIP.	60.0	62.6	64.2	65.8	68.2	70.7	71.9	77.5	80.8	83.7	86.4
29	I OTHER DURABLE GOODS	22.3	24.0	25.1	25.9	26.7	27.4	28.2	29.2	30.3	31.5	32.6
30												
31	I NONDURABLE GOODS	337.9	346.7	353.1	362.8	371.0	378.9	386.4	395.6	405.4	415.5	425.3
32	I FOOD AND BEVERAGES	165.0	164.9	164.1	168.7	172.5	176.0	179.4	182.9	186.4	190.2	194.0
33	I CLOTHING AND SHOES	70.0	74.1	77.6	80.3	82.7	85.2	87.7	90.6	93.6	96.7	99.8
34	I GASOLINE AND OIL	27.9	29.4	30.6	31.1	31.0	30.6	30.1	29.5	29.2	28.9	28.6
35	I OTHER NONDURABLE GOODS	75.1	78.4	80.9	82.8	84.8	87.1	89.3	92.6	96.1	99.6	102.8
36												
37	I SERVICES	407.6	419.4	428.5	441.4	455.8	470.7	486.0	502.7	519.9	537.3	554.9
38	I HOUSING	146.5	150.7	152.6	156.2	161.3	166.9	172.5	178.2	183.8	189.6	195.4
39	I HOUSEHOLD OPERATION SERVICES	58.4	60.1	61.4	63.2	65.3	67.5	69.8	72.4	75.0	77.7	80.4
40	I TRANSPORTATION SERVICES	34.2	35.8	36.7	37.8	38.9	40.0	41.0	42.1	43.3	44.5	45.6
41	I OTHER SERVICES	168.6	172.8	177.8	184.2	190.3	196.4	202.8	210.1	217.8	225.6	233.5

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 3.20 PERSONAL CONSUMPTION EXPENDITURES, GROWTH RATES

LINE AND LABEL	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
-----CURRENT DOLLARS-----												
1	I PERSONAL CONSUMPTION EXPENDITURES	10.8	9.6	8.7	10.0	9.6	9.1	8.4	8.8	8.3	8.0	7.5
2	I DURABLE GOODS	9.8	7.1	7.3	9.8	9.0	7.8	7.3	8.6	7.9	7.2	6.0
3	I AUTOS AND PARTS	9.8	3.2	7.4	11.5	9.4	7.2	5.9	8.6	8.1	7.4	5.5
4	I FURNITURE AND HOUSEHOLD EQUIP.	8.1	9.4	6.6	8.3	8.7	8.5	8.8	8.8	7.8	7.0	6.3
5	I OTHER DURABLE GOODS	15.5	12.9	9.1	9.1	8.3	7.8	7.4	7.9	7.7	7.3	6.7
6	I NONDURABLE GOODS	9.4	9.2	7.7	8.9	8.3	7.9	7.4	7.5	7.3	7.0	6.5
7	I FOOD AND BEVERAGES	9.6	7.8	6.5	8.4	8.1	7.9	7.5	7.5	7.1	6.7	6.3
8	I CLOTHING AND SHOES	8.1	9.8	8.1	9.0	8.3	7.8	7.4	7.4	7.0	6.7	6.3
9	I GASOLINE AND OIL	8.4	12.4	10.8	9.6	7.1	5.9	4.7	4.4	4.6	4.6	4.2
10	I OTHER NONDURABLE GOODS	10.1	10.6	8.9	9.3	9.0	8.9	8.4	9.1	8.9	8.5	7.7
11	I SERVICES	12.3	10.8	9.8	11.1	10.9	10.5	10.0	9.8	9.3	9.0	8.5
12	I HOUSING	12.2	11.4	9.6	10.1	10.7	10.4	9.7	9.2	8.5	8.1	7.7
13	I HOUSEHOLD OPERATION SERVICES	12.6	10.1	8.8	10.0	9.1	8.9	8.6	8.5	7.9	7.5	7.2
14	I TRANSPORTATION SERVICES	19.3	12.4	9.6	11.1	10.4	10.1	9.5	9.2	9.1	9.0	8.1
15	I OTHER SERVICES	11.0	10.3	10.4	12.3	11.8	11.2	10.7	10.7	10.2	10.0	9.5
-----CONSTANT 72 DOLLARS-----												
16	I PERSONAL CONSUMPTION EXPENDITURES	1.6	2.5	2.0	3.0	3.0	2.8	2.7	3.2	3.1	3.0	2.8
17	I DURABLE GOODS	4.0	1.0	1.9	3.8	3.8	3.0	2.8	4.3	3.9	3.3	2.3
18	I AUTOS AND PARTS	1.8	-4.8	0.0	5.1	4.5	2.2	0.9	3.9	3.4	2.7	0.8
19	I FURNITURE AND HOUSEHOLD EQUIP.	4.1	4.4	2.5	2.6	3.5	3.8	4.5	4.9	4.3	3.6	3.2
20	I OTHER DURABLE GOODS	10.3	7.6	4.7	3.2	2.8	2.8	2.7	3.7	3.9	3.8	3.4
21	I NONDURABLE GOODS	2.3	2.6	1.8	2.7	2.2	2.1	2.0	2.4	2.5	2.5	2.3
22	I FOOD AND BEVERAGES	-0.0	-0.1	-0.5	2.8	2.2	2.0	1.9	1.9	2.0	2.0	2.0
23	I CLOTHING AND SHOES	5.1	5.9	4.6	3.5	3.1	3.0	2.9	3.4	3.4	3.3	3.2
24	I GASOLINE AND OIL	4.8	5.3	4.1	1.7	-0.3	-1.2	-1.0	-1.7	-1.2	-0.9	-1.1
25	I OTHER NONDURABLE GOODS	4.3	4.4	3.2	2.4	2.4	2.7	2.6	3.6	3.8	3.7	3.2
26	I SERVICES	4.7	2.9	4.2	3.0	3.2	3.3	3.2	3.4	3.4	3.4	3.3
27	I HOUSING	9.4	2.9	1.3	2.3	3.2	3.5	3.4	3.3	3.2	3.1	3.1
28	I HOUSEHOLD OPERATION SERVICES	5.4	3.0	2.1	3.0	3.3	3.4	3.4	3.7	3.6	3.6	3.5
29	I TRANSPORTATION SERVICES	10.9	4.8	2.4	3.2	2.8	2.7	2.5	2.7	2.9	2.9	2.5
30	I OTHER SERVICES	3.5	2.5	2.9	3.6	3.3	3.2	3.2	3.6	3.6	3.6	3.5

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TABLE 3.10 AUTOMOBILE CONSUMPTION

LINE	VAR LABEL	I	J	K	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
AUTOMOBILES (MILLION VEHICLES)																
1																
2																
3	SAMRDAY	B	RETAIL SALES			11.32	10.79	10.55	11.46	11.94	12.10	12.23	12.65	12.93	13.06	12.90
4	KSAMRDAY	B	STOCK IN USE (END OF YEAR)			103.10	105.00	106.78	109.81	112.57	115.23	117.76	120.27	122.64	124.91	126.86
5	NNRA	B	NEW REGISTRATIONS			11.02	10.51	10.27	11.14	11.60	11.76	11.88	12.28	12.55	12.68	12.52
6	DISAV	I	ACTUAL SCRAPPAGE			8.90	8.60	8.50	8.11	8.84	9.10	9.35	9.78	10.18	10.40	10.56
7	DISAVEXP	I	EXPECTED SCRAPPAGE			8.99	9.19	9.37	9.54	9.72	9.86	9.90	9.96	10.12	10.34	10.57
8	NAVRAGE	I	AVERAGE AGE OF THE STOCK (YEARS)			5.44	5.47	5.50	5.49	5.46	5.43	5.41	5.40	5.38	5.38	5.39
9																
PERSONAL CONSUMPTION EXPENDITURES (BILLION 1972 \$)																
10																
11																
12	CEDA	I	AUTOS AND PARTS			61.11	58.1	58.1	61.2	64.0	65.4	66.0	68.6	71.0	72.9	73.5
13	CEDAVN	B	NEW CARS			36.11	32.8	31.8	33.9	35.6	36.4	36.6	38.2	39.5	40.5	40.5
14	CEDAVN+T	B	RECREATIONAL VEH & TRUCKS			8.41	8.5	9.2	9.8	10.3	10.6	10.7	11.2	11.6	12.0	12.0
15	CEDAVU	B	NET USED CARS			8.81	8.7	8.7	8.5	8.7	8.9	8.9	9.1	9.3	9.6	9.8
16	CEDAP	B	TIRES, TUBES & PARTS			7.81	8.1	8.4	9.0	9.4	9.6	9.8	10.1	10.4	10.8	11.1
17																
PERSONAL CONSUMPTION EXPENDITURES (BILLION CURRENT \$)																
18																
19																
20																
21	CEDAS	I	AUTOS AND PARTS			89.11	92.0	98.8	110.2	120.6	129.3	136.9	148.8	160.7	172.6	182.1
22	CEDAVN\$	B	NEW CARS			50.11	48.8	50.1	56.7	62.1	66.0	69.2	75.0	80.5	85.7	88.9
23	CEDAVN+T\$	B	RECREATIONAL VEH & TRUCKS			11.61	12.7	14.6	16.7	18.8	20.5	22.0	24.4	26.7	29.0	30.5
24	CEDAVU\$	B	NET USED CARS			17.01	18.9	21.1	22.0	23.4	25.0	26.5	28.7	31.1	33.7	36.5
25	CEDAPS	B	TIRES, TUBES & PARTS			10.41	11.6	13.0	14.8	16.4	17.7	19.2	20.7	22.4	24.2	26.2
26																
27																
NEW CAR OPERATING COSTS (DOLLARS PER MILE)																
28																
29																
30																
31	UCCEDANCS	I	TOTAL			0.218	0.232	0.245	0.259	0.272	0.285	0.299	0.315	0.332	0.350	0.368
32	UCCEDANCS	I	CAPITALIZED PURCHASE COST			0.0851	0.093	0.099	0.106	0.112	0.117	0.121	0.127	0.134	0.141	0.148
33	UCCEDANCS	I	GASOLINE			0.0461	0.046	0.046	0.045	0.044	0.044	0.045	0.047	0.049	0.052	0.054
34	UCCEDANCS	I	OTHER			0.0871	0.094	0.100	0.108	0.116	0.124	0.132	0.141	0.149	0.158	0.166
35																
NUMBER OF PERSONS (MILLIONS)																
36	NPILD	B	LICENSED DRIVERS			141.21	144.3	147.2	149.9	152.5	154.9	157.2	159.4	161.8	164.1	166.2
37	NPINNA	E	NONAUTO COMMUTERS			14.41	14.3	14.2	14.1	14.0	13.9	13.8	13.7	13.6	13.5	13.4
38																
39																
FUEL CONSUMPTION																
40																
41	CENG	B	CONSUMPTION, GASOLINE AND OIL			27.91	29.4	30.6	31.1	31.0	30.6	30.1	29.5	29.2	28.9	28.6
42	MPV	B	ANNUAL MILES DRIVEN PER CAR (THOU)			10.551	10.73	10.90	10.96	11.06	11.16	11.25	11.35	11.50	11.66	11.77
43	MPG	I	MILES PER GALL NEW CAR AVE			14.251	15.14	16.24	17.79	19.34	20.88	21.84	22.84	22.24	22.44	22.65
44	MPGC	E	NEW CARS, CITY DRIVING			11.291	12.01	12.90	14.16	15.42	16.68	17.32	17.68	17.86	18.04	18.22
45	MPGH	E	NEW CARS, HIGHWAY DRIVING			20.951	22.22	23.78	25.92	28.05	30.15	31.11	31.52	31.75	31.99	32.23
46	MPGAVG	I	AVERAGE, ALL CARS			12.811	13.05	13.38	13.84	14.47	15.23	16.09	16.99	17.89	18.76	19.58
47																
48	PUCEDAVN	I	UNIT PUR PRICE, NEW CARS (1972 \$)			4.6691	4.703	4.761	4.766	4.823	4.874	4.885	4.927	5.011	5.102	5.178
49	CEDAVN+T/VN	E	RATIO, CEDAVN+T TO CEDAVN			23.181	25.85	28.86	28.96	29.06	29.16	29.26	29.36	29.46	29.56	29.66
50	RACEDAVN	E	RATIO, CEDAVN TO TOTAL CARS SOLD			0.681410	0.6470	0.6332	0.6204	0.6184	0.6164	0.6144	0.6124	0.6104	0.6084	0.6064
51	RACENGAVN	E	RATIO, CENG TO CENGAVN			0.328510	0.3361	0.3442	0.3462	0.3482	0.3502	0.3522	0.3542	0.3562	0.3582	0.3602

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TABLE 3.40 AUTOMOBILE CONSUMPTION, GROWTH RATES

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
AUTOMOBILES (MILLION VEHICLES)													
1													
2													
3	SAWRDRAV	B RETAIL SALES	1.31	-4.6	-2.2	8.6	4.2	1.4	1.1	3.4	2.2	1.0	-1.3
4	KSARRDRAV	B STOCK IN USE (END OF YEAR)	2.11	1.8	1.7	2.8	2.5	2.4	2.2	2.1	2.0	1.9	1.6
5	NNRA	B NEW REGISTRATIONS	1.31	-4.6	-2.2	8.6	4.1	1.4	1.1	3.4	2.2	1.0	-1.2
6	DISAV	I ACTUAL SCRAPPAGE	1.71	-3.4	-1.2	-4.6	9.0	2.9	2.8	4.5	4.1	2.2	1.6
7	DISAVEXP	I EXPECTED SCRAPPAGE	2.71	2.3	1.9	1.8	2.0	1.4	0.4	0.6	1.6	2.2	2.2
8	NAVRAGE	I AVERAGE AGE OF THE STOCK (YEARS)	-0.21	0.4	0.6	-0.2	-0.5	-0.5	-0.3	-0.3	-0.2	-0.1	0.3
PERSONAL CONSUMPTION EXPENDITURES (BILLION 1972 \$)													
9													
10													
11													
12	CEDA	I AUTOS AND PARTS	1.01	-4.0	0.0	5.3	4.5	2.2	0.9	3.9	3.4	2.7	0.8
13	CEDAVN	B NEW CARS	0.31	-0.1	-3.1	6.5	5.1	3.1	0.6	4.4	3.6	2.5	-0.1
14	CEDAVN+T	B RECREATIONAL VEH & TRUCKS	4.01	1.4	8.1	6.9	5.5	2.5	0.9	4.7	3.9	2.9	0.2
15	CEDAVU	B NET USED CARS	3.01	-0.2	0.0	-2.4	1.8	2.0	0.0	2.2	2.5	2.4	2.0
16	CEDAP	B TIRES, TUBES & PARTS	2.01	3.1	4.1	7.3	4.1	2.4	2.5	2.7	3.1	3.4	3.3
PERSONAL CONSUMPTION EXPENDITURES (BILLION CURRENT \$)													
17													
18													
19													
20													
21	CEDAS	I AUTOS AND PARTS	9.41	3.2	7.4	11.5	9.4	7.2	5.9	8.6	8.1	7.4	5.5
22	CFDAVNS	I NEW CARS	8.41	-2.7	2.7	13.2	9.4	6.4	4.8	8.4	7.4	6.4	3.7
23	CEDAVN+T	I RECREATIONAL VEH & TRUCKS	13.61	9.2	15.4	14.2	12.5	9.1	7.2	10.7	9.6	8.4	5.4
24	CEDAVU	I NET USED CARS	9.41	11.6	11.7	3.9	6.4	7.1	6.1	8.0	8.3	8.6	8.3
25	CEDAPS	I TIRES, TUBES & PARTS	9.51	11.6	11.7	14.4	10.4	8.4	8.2	8.1	8.1	8.2	7.9
NEW CAR OPERATING COSTS (DOLLARS PER MILE)													
26													
27													
28													
29													
30	UCCFADACS	I TOTAL	6.01	6.4	5.5	5.4	5.1	4.8	4.9	5.4	5.5	5.5	5.2
31	UCCFADACS	I CAPITALIZED PURCHASE COST	11.71	8.7	7.1	6.5	5.6	4.6	3.7	4.8	5.2	5.4	5.3
32	UCCFADACS	I GASOLINE	-2.41	0.4	-0.8	-1.6	-1.2	-0.9	2.8	4.2	4.7	4.4	4.3
33	UCCFADACS	I OTHER	7.61	7.3	7.0	7.5	7.3	7.1	6.8	6.3	5.9	5.8	5.6
NUMBER OF PERSONS (MILLIONS)													
34													
35													
36													
37	NPILN	B LICENSED DRIVERS	2.41	2.2	2.0	1.9	1.7	1.6	1.5	1.5	1.5	1.5	1.2
38	NPILN	I NONAUTO COMPUTERS	-0.71	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
FUEL CONSUMPTION													
39													
40													
41													
42	CENG	B CONSUMPTION, GASOLINE AND OIL	4.01	5.3	4.1	1.7	-0.3	-1.2	-1.0	-1.7	-1.2	-0.9	-1.1
43	MPV	B ANNUAL MILES DRIVEN BY ONE CAR	1.91	1.7	1.5	0.6	0.9	0.9	0.8	0.9	1.3	1.4	0.9
44	MPV	I MILES PER GALL NEW CAR AVE	6.21	6.3	7.3	9.5	8.0	8.0	3.6	1.8	0.9	0.9	0.9
45	MPG	E NEW CARS, CITY DRIVING	6.21	6.4	7.4	9.8	8.9	8.2	3.8	2.1	1.0	1.0	1.0
46	MPGC	E NEW CARS, HIGHWAY DRIVING	6.01	6.1	7.0	9.0	8.2	7.5	3.2	1.3	0.7	0.7	0.7
47	MPGH	I AVERAGE, ALL CARS	1.21	1.9	2.6	3.4	4.5	5.3	5.6	5.6	5.3	4.9	4.4
48	MPGAVG	I UNIT PUR PRICE, NEW CARS (1972 \$)	2.71	0.7	1.2	0.1	1.2	1.1	-0.2	1.3	1.7	1.8	1.5
49													
50	PUCFADVN	I UNIT PUR PRICE, NEW CARS (1972 \$)	2.71	0.7	1.2	0.1	1.2	1.1	-0.2	1.3	1.7	1.8	1.5

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 4.10 FIXED INVESTMENT (CURRENT \$)

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IFBS	I FIXED INVESTMENT	128,731	150,713	168,344	420,904	483,845	537,111	589,826	665,997	738,986	802,477	855,044
2	IRFMS	I NONRESIDENTIAL INVESTMENT	222,181	247,433	261,744	295,311	332,000	369,649	409,144	453,647	502,000	553,066	604,077
3	IARGS	I NONRESIDENTIAL INVEST EXCL IBA	166,181	186,882	204,211	232,266	262,199	293,799	326,749	362,337	402,594	445,477	488,663
4	IAGS	I FARM	13,911	15,955	15,952	19,337	25,110	27,400	31,066	35,111	38,800	42,229	45,677
5	IAMS	I MINING	9,771	5,449	6,255	7,066	8,777	9,866	10,722	11,855	13,433	15,655	17,811
6	IAMS	I TOTAL MANUFACTURING	67,461	76,377	83,114	93,711	105,171	116,599	128,255	141,511	156,666	172,211	187,055
7	IAMD3	I DURABLE GOODS	31,441	36,733	40,649	46,119	51,611	56,339	61,288	67,777	75,330	82,339	88,744
8	IAMD243	I LUMBER	1,411	1,622	1,700	1,955	2,288	2,666	2,988	3,355	3,766	4,244	4,722
9	IAMD253	I FURNITURE	0,291	0,332	0,355	0,411	0,444	0,477	0,533	0,588	0,644	0,700	0,777
10	IAMD323	I STONE, CLAY AND GLASS	2,231	2,455	2,788	3,100	3,822	4,377	4,722	5,011	5,422	5,955	6,600
11	IAMD333	I PRIMARY METALS	6,411	7,533	8,411	9,533	10,522	11,444	12,411	13,688	15,066	16,044	16,799
12	IAMD343	I FABRICATED METAL PRODUCTS	2,561	2,900	3,066	3,500	3,844	4,255	4,666	5,044	5,466	5,844	6,311
13	IAMD353	I NONELECTRICAL MACHINERY	4,671	7,855	8,644	9,722	10,988	12,177	13,311	14,799	16,444	18,200	19,799
14	IAMD363	I ELECTRICAL MACHINERY	3,531	4,277	4,677	5,477	6,244	6,899	7,500	8,166	9,088	10,100	11,099
15	IAMD373	I MOTOR VEHICLES	4,691	5,666	6,511	7,720	7,533	7,455	7,844	9,011	10,300	11,222	11,599
16	IAMD383	I NONAUTO TRANS EQ + ORD + MISC	2,321	2,655	2,900	3,344	3,800	4,255	4,677	5,155	5,711	6,388	7,055
17	IAMD393	I INSTRUMENTS	1,331	1,488	1,666	1,888	2,166	2,433	2,677	3,000	3,388	3,733	4,033
18	IAMD403	I NONDURABLE GOODS	36,021	39,644	42,444	47,522	53,577	60,200	66,977	73,733	81,366	89,822	98,311
19	IAMD203	I FOOD AND BEVERAGES	4,731	5,111	5,522	6,100	6,377	6,733	7,422	8,466	9,688	11,033	12,555
20	IAMD213	I TOBACCO	0,261	0,299	0,311	0,366	0,400	0,455	0,511	0,566	0,622	0,699	0,766
21	IAMD223	I TEXTILES	1,021	1,122	1,244	1,444	1,688	1,900	2,088	2,299	2,500	2,699	2,844
22	IAMD233	I APPAREL	0,401	0,433	0,488	0,555	0,622	0,700	0,799	0,900	1,011	1,133	1,255
23	IAMD243	I PAPER	3,871	4,666	5,133	5,699	6,466	7,388	8,277	9,411	10,300	11,511	12,711
24	IAMD253	I PRINTING AND PUBLISHING	1,111	1,199	1,322	1,466	1,633	1,833	2,055	2,322	2,622	2,955	3,299
25	IAMD263	I CHEMICALS	7,471	8,322	9,277	10,644	12,066	13,922	15,866	17,566	19,488	22,044	24,266
26	IAMD273	I PETROLEUM	15,331	16,466	16,888	18,666	21,133	23,677	25,955	27,988	29,933	31,977	34,277
27	IAMD283	I RUBBER	1,651	1,877	2,077	2,366	2,933	3,322	3,700	4,200	4,833	5,422	5,944
28	IAMD293	I LEATHER	0,171	0,199	0,222	0,255	0,266	0,300	0,333	0,355	0,388	0,411	0,433
29	IAMD303	I TRANSPORTATION	8,321	8,677	9,066	10,200	10,811	11,455	12,577	14,100	15,966	18,277	20,722
30	IAMD313	I UTILITIES	28,941	32,622	36,222	40,366	44,977	50,299	55,922	62,111	68,866	76,122	84,022
31	IAMD323	I COMMUNICATIONS	17,741	20,188	23,211	26,844	30,500	34,500	38,466	42,566	47,299	52,688	58,444
32	IAMD333	I COMMERCIAL AND OTHER	81,251	88,155	87,944	97,388	108,688	119,611	131,411	146,444	161,000	175,855	190,388
33	IAMD343	I COMMERCIAL	25,041	27,544	30,400	34,333	38,877	43,711	49,011	55,144	61,588	68,266	74,933
34	IAMD353	I CONCEPTUAL DIFF, DEA VS NIA	56,201	60,622	57,544	63,055	69,800	75,900	82,400	91,300	99,411	107,599	115,444
35	IAMD363	I RESIDENTIAL STRUCTURES	106,341	103,288	106,599	125,588	151,844	167,422	180,644	212,311	236,988	249,400	250,977
36	IAMD373	I NONFARM RESIDENTIAL STRUCTURES	103,141	99,711	102,611	121,177	146,988	162,088	174,788	205,433	230,055	241,844	242,855
37	IAMD383	I FARM RESIDENTIAL STRUCTURES	1,471	1,788	1,966	2,088	2,199	2,333	2,422	2,500	2,655	2,777	2,899
38	IAMD393	I RESIDENTIAL DURABLE EQUIP.	1,741	1,799	2,022	2,344	2,677	3,044	3,433	3,844	4,288	4,744	5,233

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TABLE 4.20 FIXED INVESTMENT, GROWTH RATES

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IRFS	I FIXED INVESTMENT	16.51	6.7	5.0	14.3	15.0	11.0	9.8	12.9	11.0	6.6	6.6
2													
3	IRFNS	I NONRESIDENTIAL INVESTMENT	16.81	11.3	5.8	12.8	12.4	11.4	10.7	10.9	10.7	10.2	9.2
4													
5	IARAGS	I NONRESIDENTIAL INVEST EXCL IBA	11.91	12.4	9.3	13.7	12.9	12.1	11.2	10.9	11.1	10.7	9.7
6													
7	IAGS	I FARM	9.71	14.7	-0.2	21.6	19.3	18.6	16.3	10.2	10.5	9.0	8.0
8	IAMGS	I MINING	6.01	15.1	14.0	19.3	17.6	12.4	8.7	10.6	13.3	16.5	13.8
9	IAMFS	I TOTAL MANUFACTURING	12.11	13.2	8.9	12.7	12.2	10.9	10.0	10.3	10.7	9.9	8.6
10													
11	IAMFDS	I DURABLE GOODS	13.21	16.8	10.8	13.5	11.7	9.3	8.7	10.6	11.1	9.4	7.7
12													
13	IAMFD24S	I LUMBER	13.61	15.0	5.2	14.2	17.1	16.7	12.2	12.2	12.4	12.5	11.5
14	IAMFD25S	I FURNITURE	11.01	10.7	9.4	18.1	7.6	6.5	11.4	10.8	8.7	10.6	9.2
15	IAMFD32S	I STONE, CLAY AND GLASS	11.91	10.0	13.4	11.5	23.1	14.6	7.8	6.3	8.0	9.9	10.9
16	IAMFD33S	I PRIMARY METALS	12.81	17.6	11.6	14.5	9.2	8.8	8.4	10.3	10.0	6.6	4.6
17	IAMFD34S	I FABRICATED METAL PRODUCTS	12.01	13.2	5.6	14.1	9.8	10.6	9.7	8.2	8.3	7.0	8.1
18	IAMFD35S	I NONELECTRICAL MACHINERY	15.81	17.7	10.1	12.4	13.0	10.8	9.4	11.2	11.5	10.4	8.7
19	IAMFD36S	I ELECTRICAL MACHINERY	7.71	20.8	9.4	17.1	14.2	10.4	8.8	6.9	11.3	11.2	9.8
20	IAMFD37S	I MOTOR VEHICLES	15.51	20.8	15.0	10.6	4.6	-1.0	5.2	14.8	14.4	8.9	3.4
21	IAMFD37SP2S	I NONAUTO TRANS EQ + DRD + MISC	17.61	14.3	9.6	15.2	13.6	11.8	9.9	10.4	11.0	11.6	10.5
22	IAMFD38S	I INSTRUMENTS	12.11	10.5	12.7	13.2	14.9	12.4	10.1	12.0	12.7	10.5	8.0
23													
24	IAMFNS	I NONDURABLE GOODS	11.21	10.0	7.1	12.0	12.7	12.4	11.2	10.1	10.3	10.4	9.4
25													
26	IAMFN20S	I FOOD AND BEVERAGES	13.21	7.9	8.1	10.5	4.4	5.6	10.2	14.0	14.6	13.9	13.8
27	IAMFN21S	I TOBACCO	9.71	8.7	8.8	14.1	13.2	12.5	11.9	11.1	10.5	10.2	10.6
28	IAMFN22S	I TEXTILES	11.11	9.9	10.6	16.2	16.7	13.0	9.4	10.7	9.1	7.5	5.7
29	IAMFN23S	I APPAREL	8.11	7.9	12.0	14.5	12.6	12.8	12.8	13.6	12.5	11.7	10.4
30	IAMFN26S	I PAPER	15.21	20.4	9.9	11.0	13.7	14.1	12.2	10.2	12.9	11.8	10.5
31	IAMFN27S	I PRINTING AND PUBLISHING	9.61	7.8	10.9	10.8	11.2	12.2	12.2	13.0	13.2	12.4	11.6
32	IAMFN28S	I CHEMICALS	9.41	11.4	11.4	14.8	13.3	15.4	14.0	10.7	11.0	13.1	10.1
33	IAMFN29S	I PETROLEUM	10.61	7.3	2.6	10.5	13.3	12.0	9.6	7.8	7.0	6.8	7.2
34	IAMFN30S	I RUBBER	13.71	13.3	10.7	14.0	24.4	13.2	11.5	13.4	15.1	12.2	9.5
35	IAMFN31S	I LEATHER	7.81	11.1	13.6	15.4	5.3	12.0	10.1	8.4	7.9	6.9	5.7
36													
37	IAMFNS	I TRANSPORTATION	20.01	4.2	4.5	12.5	6.0	6.0	9.8	12.1	13.2	14.5	13.5
38													
39	IAMFNU9S	I UTILITIES	12.21	12.7	11.0	11.4	11.4	11.8	11.2	11.1	10.9	10.5	10.4
40													
41	IAMFNC4S	I COMMUNICATIONS	14.81	13.8	15.0	15.6	13.6	13.1	11.5	10.7	11.1	11.4	10.9
42													
43	IACUS	I COMMERCIAL AND OTHER	25.31	8.5	-0.2	10.7	11.6	10.1	9.9	11.4	9.9	9.2	8.3
44	IACMS	I COMMERCIAL	9.01	10.0	10.4	12.9	13.2	12.4	12.1	12.5	11.7	10.8	9.8
45	IRAS	I CONCEPTUAL DIFF, BEA VS NIA	38.21	7.9	-5.1	9.6	10.7	8.7	8.6	10.8	8.9	8.2	7.3
46													
47	IRFNS	I RESIDENTIAL STRUCTURES	15.71	-2.9	3.2	17.8	20.9	10.3	7.9	17.5	11.6	5.2	0.6
48													
49	IRFNS	I NONFARM RESIDENTIAL STRUCTURES	16.01	-3.3	2.9	18.1	21.3	10.3	7.8	17.8	11.7	5.1	0.4
50	IRFNS	I FARM RESIDENTIAL STRUCTURES	-1.41	21.1	10.4	5.8	5.6	5.2	5.0	4.8	4.6	4.4	4.5
51	IRFNS	I RESIDENTIAL DURABLE EQUIP.	18.41	2.7	13.1	15.8	14.1	13.7	12.8	12.1	11.4	10.8	10.2

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 5.10 FIXED INVESTMENT (1972 \$)

LINE	VAR LABEL	I T C M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IRF	I FIXED INVESTMENT	199.61	196.01	191.46	202.20	215.61	223.54	230.23	240.22	256.01	263.66	267.13
2													
3	IRFN	I NONRESIDENTIAL INVESTMENT	140.08	144.51	143.30	150.01	157.18	163.70	169.99	177.65	185.91	193.97	200.80
4													
5	IARAG	I NONRESIDENTIAL INVEST EXCL IBA	104.68	109.11	111.80	117.99	124.13	130.10	135.76	141.90	149.09	156.24	162.42
6													
7	IAGG	FARM	6.76	9.32	8.72	9.84	10.94	12.13	13.24	13.75	14.37	14.83	15.18
8	IAMG	MINING	3.00	3.21	3.42	3.79	4.15	4.37	4.45	4.64	4.97	5.49	5.92
9	IAMF	TOTAL MANUFACTURING	42.91	44.60	45.51	47.60	49.79	51.83	53.28	55.41	58.02	60.40	62.17
10	IAMD	DURABLE GOODS	19.80	21.45	22.28	23.46	24.93	26.97	28.54	29.88	31.39	32.90	34.50
11	IAMD24	LUMBER	0.89	0.95	0.93	0.99	1.08	1.18	1.24	1.31	1.39	1.49	1.57
12	IAMD25	FURNITURE	0.18	0.19	0.19	0.21	0.21	0.21	0.22	0.23	0.24	0.25	0.26
13	IAMD32	STONE, CLAY AND GLASS	1.40	1.43	1.52	1.57	1.61	1.94	1.96	2.01	2.09	2.19	2.19
14	IAMD33	PRIMARY METALS	4.03	4.40	4.60	4.89	4.98	5.07	5.15	5.36	5.58	5.83	5.88
15	IAMD34	FABRICATED METAL PRODUCTS	1.61	1.70	1.68	1.78	1.82	1.88	1.93	1.97	2.02	2.05	2.10
16	IAMD35	NON-ELECTRICAL MACHINERY	4.20	4.59	4.73	4.94	5.20	5.39	5.53	5.79	6.11	6.38	6.58
17	IAMD36	ELECTRICAL MACHINERY	2.31	2.49	2.55	2.78	2.96	3.05	3.11	3.20	3.36	3.54	3.69
18	IAMD37	MOTOR VEHICLES	2.85	3.31	3.57	3.66	3.56	3.30	3.26	3.53	3.61	3.93	3.85
19	IAMD37SP2	NONAUTOTRANS EQ + QND + MSC	1.46	1.55	1.59	1.70	1.80	1.88	1.94	2.02	2.12	2.24	2.34
20	IAMD38	INSTRUMENTS	0.64	0.86	0.91	0.96	1.02	1.08	1.11	1.17	1.25	1.31	1.34
21	IAMN	NONDURABLE GOODS	22.91	23.15	23.24	24.14	25.16	26.64	27.82	28.87	30.13	31.50	32.68
22	IAMN20	FOOD AND BEVERAGES	2.98	2.98	3.02	3.10	3.02	2.98	3.08	3.31	3.59	3.87	4.17
23	IAMN21	TUBACCO	0.17	0.17	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25
24	IAMN22	TEXTILES	0.64	0.66	0.68	0.73	0.80	0.84	0.87	0.90	0.93	0.94	0.94
25	IAMN23	APPAREL	0.25	0.25	0.26	0.28	0.30	0.31	0.33	0.35	0.37	0.40	0.42
26	IAMN26	PAPER	2.44	2.72	2.81	2.89	3.06	3.27	3.44	3.57	3.81	4.04	4.23
27	IAMN27	PRINTING AND PUBLISHING	0.70	0.70	0.72	0.74	0.77	0.81	0.85	0.91	0.97	1.03	1.09
28	IAMN28	CHEMICALS	4.71	4.86	5.07	5.41	5.71	6.16	6.59	6.88	7.22	7.73	8.06
29	IAMN29	PETROLEUM	9.66	9.61	9.24	9.48	10.00	10.88	10.78	10.96	11.08	11.21	11.39
30	IAMN30	RUBBER	1.04	1.09	1.13	1.20	1.39	1.47	1.54	1.64	1.79	1.90	1.97
31	IAMN31	LEATHER	0.11	0.11	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14
32													
33	IARGT	TRANSPORTATION	5.24	5.06	4.96	5.18	5.12	5.07	5.22	5.52	5.91	6.41	6.89
34													
35	IARGU49	UTILITIES	18.23	19.05	19.81	20.50	21.29	22.27	23.23	24.32	25.50	26.70	27.93
36													
37	IARGC48	COMMUNICATIONS	11.17	11.78	12.71	13.64	14.44	15.28	15.98	16.67	17.51	18.48	19.42
38													
39	IACD	COMMERCIAL AND OTHER	51.18	51.48	48.14	49.47	51.45	52.96	54.59	57.34	59.62	61.68	63.28
40	IACH	COMMERCIAL	15.77	16.08	16.64	17.44	18.40	19.36	20.36	21.59	22.81	23.94	24.91
41	IHA	CONCEPTUAL DIFF, BEA VS NIA	35.40	35.40	31.50	32.03	33.05	33.61	34.23	35.75	36.82	37.74	38.17

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TABLE 5.10 FIXED INVESTMENT (1972 \$)

LINE	VAR LABEL	ITEM	1970	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	INFR	RESIDENTIAL STRUCTURES	59.51	51.5	48.2	52.2	58.4	59.8	60.2	66.6	70.1	69.7	66.3
2	INFRN	NONFARM	57.41	49.3	45.9	49.8	56.0	57.3	57.6	63.8	67.2	66.7	63.3
3	INFRF	FARM	0.81	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
4	INFRF	RESIDENTIAL DURABLE EQUIP.	1.31	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2
5	INFRXNU-MH	ADDITIONS AND ALTERATIONS	12.9	13.3	14.0	14.4	14.6	14.2	14.1	14.7	14.5	14.1	13.7
6	HSPR	PRIVATE HOUSING STARTS (THOU)	1982	1655	1500	1668	1951	1993	2030	2229	2417	2394	2235
7	HSPRS1	SINGLE UNITS	1390	1171	1116	1197	1410	1390	1403	1577	1694	1667	1552
8	HSPRSH	MULTIPLE UNITS	592	484	385	471	541	603	635	652	723	727	683
9	HSPRSH	MOBILE HOMES (THOU)	265	250	250	336	317	482	415	483	391	367	356
10	HSPRSH	PUBLIC HOUSING STARTS (THOU)											
11	HSPRSH	SINGLE UNITS	1	2	2	2	2	2	2	2	2	2	2
12	HSPRSH	MULTIPLE UNITS	0	0	0	0	0	0	0	0	0	0	0
13	HSPRSH	MOBILE HOMES											
14	HSPRSH	TOTAL STOCK OF RES UNITS (MILL)	81.43	82.76	83.71	84.87	86.27	87.84	89.36	91.11	92.93	94.68	96.25
15	KHUA	SINGLE UNITS	54.14	55.19	55.98	56.84	57.92	58.96	60.01	61.23	62.56	63.86	65.03
16	KHUA	MULTIPLE UNITS	22.37	22.58	22.69	22.89	23.16	23.49	23.85	24.24	24.69	25.14	25.54
17	KHUA	MOBILE HOMES	4.92	4.99	5.03	5.14	5.20	5.39	5.49	5.64	5.68	5.68	5.67
18	KHUMH	DISCARDS FROM STOCKS (THOU)											
19	KHUMH	SINGLE UNITS	318	320	331	335	340	347	353	359	366	374	382
20	KHUMH	MULTIPLE UNITS	268	269	276	273	272	271	271	272	272	273	278
21	KHUMH	MOBILE HOMES	164	162	205	230	259	287	313	336	353	363	367
22	HORTOS1	DISCARD RATES (%)											
23	HORTOS1	SINGLE UNITS	0.595	0.592	0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595
24	HORTOS1	MULTIPLE UNITS	1.214	1.203	1.221	1.204	1.188	1.171	1.155	1.139	1.123	1.106	1.106
25	HORTOS1	MOBILE HOMES	93.02	93.64	94.45	95.02	95.33	95.41	95.52	95.34	95.03	94.78	94.69
26	HORTOS1	TOTAL OCCUPANCY RATE (%)	5.00	4.75	4.29	3.98	3.85	4.10	4.14	4.12	4.15	4.92	5.50
27	HORTOS1	RENTAL HOUSING VACANCY RATE (%)											
28	HORTOS1	RATIO SINGLE UNITS AND MOBILE HOMES TO TOTAL HOUSING UNITS (%)	72.60	72.71	72.89	73.03	73.16	73.26	73.31	73.40	73.44	73.45	73.46
29	HORTOS1	RATIO OF SINGLE UNITS TO SINGLE UNITS PLUS MOBILE HOMES (%)	91.70	91.71	91.75	91.71	91.77	91.62	91.61	91.56	91.68	91.83	91.97
30	HORTOS1	CHANGE IN BUS. INVENTORIES	11.51	6.67	4.94	8.65	12.19	13.21	14.07	16.34	17.70	18.15	17.63
31	HORTOS1	FARM	-0.70	-0.12	0.25	0.45	0.02	-0.17	0.05	0.17	0.13	0.10	0.10
32	HORTOS1	AUTO-DEALER	-0.10	0.14	-0.05	0.17	0.10	0.37	0.52	0.57	0.52	0.53	0.58
33	HORTOS1	NONAUTO MANUFACTURING	6.50	2.96	2.55	4.59	6.33	6.50	6.49	7.72	8.56	8.65	8.44
34	HORTOS1	MANUFACTURING	5.44	3.70	2.19	3.44	5.73	6.52	7.01	7.88	8.49	8.87	8.51
35	HORTOS1	NONFARM	11.85	6.80	4.69	8.20	12.17	13.38	14.02	16.17	17.57	18.05	17.53

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



TABLE 5.20 FIXED INVESTMENT, GROWTH RATES

LINE	YAM LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IBF	I FIXED INVESTMENT	6.51	-1.8	-2.3	5.6	6.6	3.7	3.0	6.1	4.8	3.0	1.3
2													
3	IRFN	I NONRESIDENTIAL INVESTMENT	7.91	3.2	-0.8	4.7	4.8	4.2	3.8	4.5	4.6	4.3	3.5
4													
5	JAG	I NONRESIDENTIAL INVEST EXCL IBA	2.61	4.2	2.5	5.5	5.2	4.8	4.4	4.5	5.1	4.8	4.0
6													
7	IAAG	FARM	-7.61	6.3	-6.4	12.9	11.2	10.9	9.1	3.9	4.5	3.2	2.4
8	IAMG	MINING	-2.11	6.7	6.8	10.7	9.6	5.1	2.0	4.2	7.2	10.4	7.9
9	IAMF	TOTAL MANUFACTURING	3.61	5.0	2.0	4.6	4.6	3.7	3.2	4.0	4.7	4.1	2.9
10	IAMFD	DURABLE GOODS	4.61	8.3	3.9	5.3	4.1	2.2	2.0	4.2	5.1	3.6	2.1
11	IAMFD24	LUMBER	5.01	6.6	-1.4	6.0	9.1	9.1	5.3	5.8	6.3	6.6	5.7
12	IAMFD25	FURNITURE	2.61	2.6	2.6	9.6	0.3	-0.4	4.6	4.5	2.8	4.8	3.5
13	IAMFD32	STONE, CLAY AND GLASS	3.41	2.0	6.3	3.5	14.8	0.3	1.2	0.2	2.2	4.0	5.1
14	IAMFD33	PRIMARY METALS	4.21	9.0	4.7	6.3	1.8	1.8	1.7	3.9	4.1	0.9	-0.8
15	IAMFD34	FABRICATED METAL PRODUCTS	3.51	5.0	-1.0	5.9	2.3	3.4	2.9	2.0	2.4	1.3	2.5
16	IAMFD36	ELECTRICAL MACHINERY	-0.51	12.0	2.5	8.7	6.4	3.3	2.1	2.6	5.2	5.3	4.1
17	IAMFD35	NON-ELECTRICAL MACHINERY	7.01	9.2	3.2	4.3	5.3	3.6	2.6	4.8	5.4	4.5	3.1
18	IAMFD371	MOTOR VEHICLES	6.71	12.0	7.8	2.6	-2.6	-7.4	-1.3	8.2	8.1	3.1	-2.0
19	IAMFD37SP2	NONAUTO TRANS EQ + ORD + MISC	5.91	6.0	2.7	6.9	5.9	4.5	3.1	4.0	4.9	5.7	4.8
20	IAMFD38	INSTRUMENTS	3.61	2.5	5.6	5.0	7.1	5.2	3.3	5.6	6.6	4.7	2.3
21	IAMFD39	NONDURABLE GOODS	2.81	2.0	0.4	3.9	5.1	5.1	4.4	3.8	4.4	4.5	3.7
22	IAMFD40	FOOD AND BEVERAGES	4.61	0.0	1.3	2.5	-2.7	-1.2	3.4	7.4	8.3	7.8	7.9
23	IAMFD21	TOBACCO	1.41	0.8	2.0	5.9	5.5	5.2	5.0	4.7	4.5	4.3	4.8
24	IAMFD22	TEXTILES	2.71	1.9	3.7	7.9	8.7	5.7	2.7	3.7	6.4	5.8	4.7
25	IAMFD23	APPAREL	-0.11	0.0	5.0	6.3	5.0	5.5	5.8	7.0	6.4	5.8	4.7
26	IAMFD26	PAPER	6.51	11.6	3.1	3.0	5.9	6.7	5.2	3.9	6.8	5.9	4.7
27	IAMFD27	PRINTING AND PUBLISHING	1.21	-0.1	4.0	2.8	3.6	4.9	5.3	6.6	7.1	6.5	5.7
28	IAMFD28	CHEMICALS	1.11	3.3	4.4	6.5	5.6	8.0	6.9	4.3	4.9	7.1	4.3
29	IAMFD29	PETROLEUM	2.21	-0.5	-3.8	2.5	5.6	4.8	2.9	1.6	1.2	1.1	1.6
30	IAMFD30	RUBBER	5.11	5.1	3.8	5.8	15.9	5.9	4.6	6.9	8.9	6.3	3.8
31	IAMFD31	LEATHER	-0.41	3.0	6.4	7.1	-1.9	4.8	3.3	2.2	2.0	1.3	0.2
32													
33	IARGT	TRANSPORTATION	10.91	-3.4	-2.0	4.4	-1.2	-0.9	3.0	5.7	7.1	8.4	7.5
34	IARGU49	UTILITIES	3.61	4.5	4.1	3.4	3.8	4.6	4.3	4.7	4.9	4.7	4.6
35	IARGC48	COMMUNICATIONS	6.11	5.5	7.8	7.3	5.9	5.8	4.6	4.3	5.1	5.3	5.1
36	IACD	COMMERCIAL AND OTHER	15.71	0.6	-6.5	2.7	4.0	2.9	3.1	5.0	4.0	3.4	2.6
37	IACM	COMMERCIAL	0.71	2.0	3.5	4.8	5.5	5.2	5.2	6.0	5.6	5.0	4.6
38	IHA	CONCEPTUAL DIFF, BEA VS NIA	27.61	0.0	-11.0	1.7	3.2	1.7	1.9	4.4	3.0	2.5	1.7
39													
40	IRFN	I RESIDENTIAL STRUCTURES	3.21	-13.5	-6.5	8.4	12.0	2.4	0.7	10.5	5.3	-0.6	-4.8
41	IRFNN	I NONFARM	3.21	-14.1	-7.0	8.5	12.3	2.3	0.5	10.8	5.4	-0.8	-5.2
42	IRFRF	E FARM	-9.21	8.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	IRFNE	E RESIDENTIAL DURABLE EQUIP	-9.71	-2.4	7.7	7.2	6.7	6.3	5.9	5.6	5.3	5.0	4.8
44	IRFNNXNJ-MH	B ADDITIONS AND ALTERATIONS	-6.61	2.8	5.1	2.6	2.0	-2.9	-0.9	4.2	-1.3	-2.7	-2.4
45													
46	HSPR	I PRIVATE HOUSING STARTS	-0.21	-16.5	-9.3	11.2	16.9	2.2	2.3	9.4	8.4	-1.0	-6.6
47	HSPNS1	B SINGLE UNIT	-4.21	-15.7	-4.8	7.3	17.7	-1.4	1.0	12.4	7.4	-1.6	-6.9
48	HSPDPM	B MULTIPLE UNIT	10.51	-18.3	-20.4	22.3	14.9	11.4	5.3	2.7	10.9	0.6	-6.0
49	HSPHJ	I PRIV NONFARM HOUSING STARTS	-0.31	-16.7	-9.5	11.3	17.1	2.2	2.3	9.5	8.5	-1.0	-6.7
50	HSPHF	E PRIV FARM HOUSING STARTS	-3.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	HSPHMH	B MOBILE HOMES	-4.21	-5.8	0.1	34.5	-5.8	52.2	-14.0	16.4	-19.0	-6.1	-2.8

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TABLE 6.10 IMPORTS AND EXPORT DOLLARS

LINE	VAR LABEL	I	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
32	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
33	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
35	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
36	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
37	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
38	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
39	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
41	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
42	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
44	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
45	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
46	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
47	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
48	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
49	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
51	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
52	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 6.20 IMPORTS & EXPORT DEFATORS, GROWTH RATES

LINE	VAR LABEL	I	T	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
---CURRENT DOLLARS (BILL)---																
1	IMHS	I				15.91	14.2	9.3	13.0	11.5	9.7	10.3	11.2	10.8	10.3	9.4
2	IMBGTGDS	I				15.91	14.2	9.3	13.0	11.5	9.7	10.3	11.2	10.8	10.3	9.4
3	IMBGTGDS	I				15.91	14.2	9.3	13.0	11.5	9.7	10.3	11.2	10.8	10.3	9.4
4	IMBGTGDS	E				-10.61	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	IMBGTGDS	E				16.61	11.7	8.8	13.2	12.1	10.4	9.8	11.3	10.5	10.2	9.1
6	IMBGTGDS	E				9.01	4.9	5.6	13.6	2.3	6.2	10.2	13.1	10.6	10.6	9.8
7	IMBGTGDS	E				18.01	18.0	15.6	16.7	13.0	11.7	10.9	9.7	7.4	5.6	6.7
8	IMBGTGDS	E				22.21	18.0	15.6	16.7	13.0	11.7	10.9	10.2	9.9	9.7	9.5
9	IMBGTGDS	E				26.01	11.2	6.3	11.3	12.4	10.3	9.5	11.7	10.9	10.8	9.0
10	IMBGTGDS	E				32.21	12.8	6.3	11.5	13.4	11.2	10.4	12.6	11.6	11.6	9.8
11	IMBGTGDS	E				13.81	5.0	6.5	10.6	6.5	6.3	5.0	7.7	7.1	6.5	4.5
12	IMBGTGDS	E				12.71	2.0	7.3	9.6	7.6	5.4	4.0	6.7	6.1	5.4	3.4
13	IMBGTGDS	E				15.11	8.1	5.7	11.6	9.4	7.2	5.9	8.6	8.1	7.4	5.5
14	IMBGTGDS	E				25.01	19.1	7.1	12.8	9.8	7.4	12.4	11.6	12.1	11.0	10.6
15	IMBGTGDS	E				45.51	21.0	0.1	16.9	9.4	5.4	16.7	14.2	15.3	13.0	12.4
16	IMBGTGDS	E				38.41	19.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	IMBGTGDS	E				11.01	14.9	11.7	7.9	11.6	8.7	8.9	9.1	9.1	8.8	8.5
18	IMBGTGDS	E				15.01	21.3	13.9	10.1	8.0	7.0	6.6	7.3	8.0	7.9	7.9
19	IMBGTGDS	E				9.71	21.3	16.1	10.9	10.1	10.2	9.5	10.2	9.7	9.8	8.9
20	IMBGTGDS	E				11.41	12.2	11.5	9.6	9.0	9.0	9.0	9.0	9.0	9.0	9.0
21	IMBGTGDS	E				14.41	8.9	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
---CONSTANT 1972 DOLLARS---																
22	IMHS	I				11.11	5.8	1.7	6.1	5.1	4.2	5.9	6.8	6.6	6.2	5.3
23	IMBGTGDS	I				9.81	1.9	-0.3	4.6	4.6	3.8	3.7	5.5	4.9	4.8	3.6
24	IMBGTGDS	I				10.51	1.8	-0.2	4.8	4.8	4.0	3.9	5.6	4.9	4.9	3.6
25	IMBGTGDS	I				8.71	-1.1	-0.3	5.0	-5.0	-1.1	3.1	6.1	5.3	4.4	3.7
26	IMBGTGDS	I				14.71	1.6	1.1	6.8	10.4	4.4	0.3	3.1	1.4	-0.0	1.0
27	IMBGTGDS	I				-6.01	9.7	8.7	6.8	6.8	6.0	5.7	5.0	4.7	4.5	4.3
28	IMBGTGDS	I				14.31	1.0	-2.0	3.6	5.5	4.2	3.7	5.9	5.1	5.3	3.6
29	IMBGTGDS	I				20.81	10.1	1.4	9.0	6.1	4.9	9.8	9.0	9.5	8.5	8.0
30	IMBGTGDS	I				10.61	0.7	4.2	-3.8	-3.4	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3
---DEFATORS (1972=100)---																
31	PTMH	I				4.31	7.9	7.5	6.5	6.0	5.3	4.1	4.2	3.9	3.9	3.8
32	PTMGT	I				5.51	9.7	9.0	8.0	7.0	6.2	5.7	5.3	5.3	5.1	5.3
33	PTMGTF	I				0.21	2.8	6.0	8.2	7.7	7.3	6.9	6.6	6.3	5.9	5.9
34	PTMGTF	E				-2.71	1.1	5.5	8.2	7.7	7.5	7.0	6.6	6.4	6.0	5.9
35	PTMGTF	E				4.31	5.0	6.6	8.3	7.6	7.1	6.6	6.6	6.2	5.9	5.8
36	PTMGTF	E				2.91	6.6	6.3	7.3	7.0	6.2	6.6	6.3	5.9	5.6	5.6
37	PTMGTF	E				4.11	7.6	6.4	6.7	5.8	5.4	5.0	5.0	5.0	5.0	5.0
38	PTMGTF	E				12.01	10.2	8.5	7.4	6.5	5.8	5.5	5.5	5.4	5.3	5.2
39	PTMGTF	E				8.01	11.4	12.3	10.0	8.0	6.0	5.5	5.4	5.3	5.2	5.1
40	PTMGTF	E				13.71	9.6	6.8	6.2	5.8	5.8	5.6	5.6	5.5	5.3	5.3
41	PTMGTF	E				1.41	8.2	5.6	3.5	3.5	2.3	2.3	2.3	2.3	2.3	2.3
---APPENDIX---																
42	IMHS+OTH	I				12.61	14.5	5.3	8.6	5.8	4.7	9.5	8.8	9.3	8.3	7.9
43	IMHS+OTH	I				13.21	23.8	11.1	12.3	9.4	7.1	12.0	11.2	11.8	10.8	10.3

A PRODUCT OF WHARTON E&A, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

TABLE 7.00 IMPORTS/ FUELS DETAIL

LINE	VAR LABEL	I T E M	1970	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1		COAL, COKE, ETC.											
2													
3	TMCGT12	E MILLION TONS-----	4.71	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
4	TMCGT12	E % CHANGE-----	1.31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5													
6	PUMTCGT12V	E UNIT PRICE, \$/TON-----	53.451	56.19	59.50	62.77	66.22	69.87	73.71	77.76	82.04	86.55	91.31
7	PUMTCGT12V	E % CHANGE-----	8.81	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
8													
9	TMCGT12S	I VALUE, BILL CURRENT \$-----	0.251	0.27	0.28	0.30	0.31	0.33	0.35	0.37	0.39	0.41	0.43
10	TMCGT12S	I % CHANGE-----	10.21	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
11													
12	PTMCGT132	I UNIT VALUE INDEX, 1972=100-----	180.41	190.4	200.9	211.9	223.6	235.8	248.8	262.5	276.9	292.2	308.2
13	PTMCGT132	I % CHANGE-----	8.81	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
14													
15	TMCGT12	I VALUE, BILL 728-----	0.311	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
16	TMCGT12	I % CHANGE-----	1.31	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17													
18		CRUDE PETROLEUM											
19													
20	TMCGT131	E MILL BARRELS-----	2204.12455	2660.0	2899.4	3131.4	3350.6	3568.5	3768.3	3968.1	4166.5	4366.5	4566.5
21	TMCGT131	E % CHANGE-----	-8.01	11.4	8.4	9.0	8.0	7.0	6.5	5.6	5.3	5.0	4.8
22													
23	PUMTCGT131	E UNIT PRICE, \$/BARREL-----	14.551	15.71	16.45	17.73	18.80	19.83	20.82	21.86	22.96	24.10	25.31
24	PUMTCGT131	E % CHANGE-----	3.91	8.0	6.0	6.5	6.0	5.5	5.0	5.0	5.0	5.0	5.0
25													
26	TMCGT131S	I VALUE, BILL CURRENT \$-----	32.081	38.57	44.29	51.41	58.87	66.44	74.30	82.38	91.09	100.43	110.51
27	TMCGT131S	I % CHANGE-----	-4.51	20.2	14.8	16.1	14.5	12.9	11.8	10.9	10.6	10.3	10.0
28													
29	PTMCGT131	I UNIT VALUE INDEX, 1972=100-----	452.71	488.8	518.0	551.6	584.9	617.0	647.8	680.2	714.2	749.9	787.4
30	PTMCGT131	I % CHANGE-----	3.91	8.0	6.0	6.5	6.0	5.5	5.0	5.0	5.0	5.0	5.0
31													
32	TMCGT131	I VALUE, BILL 728-----	7.091	7.89	8.55	9.32	10.06	10.77	11.47	12.11	12.75	13.39	14.03
33	TMCGT131	I % CHANGE-----	-8.01	11.4	8.4	9.0	8.0	7.0	6.5	5.6	5.3	5.0	4.8
34													
35		REFINED RESIDUAL FUEL & OIL											
36													
37	TMCGT1324	E MILL BARRELS-----	511.01	531.0	550.0	580.2	609.9	639.6	669.8	699.8	729.8	759.8	789.8
38	TMCGT1324	E % CHANGE-----	3.71	3.9	3.6	5.5	5.1	4.9	4.7	4.5	4.3	4.1	3.9
39													
40	PUMTCGT1324	E UNIT PRICE, \$/BARREL-----	10.601	11.24	11.85	12.47	13.12	13.81	14.54	15.30	16.11	16.96	17.85
41	PUMTCGT1324	E % CHANGE-----	0.21	6.0	5.4	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.3
42													
43	TMCGT1324S	I VALUE, BILL CURRENT \$-----	5.421	5.97	6.52	7.23	8.00	8.83	9.74	10.71	11.76	12.88	14.10
44	TMCGT1324S	I % CHANGE-----	3.91	10.2	9.2	11.0	10.6	10.4	10.2	10.0	9.8	9.6	9.4
45													
46	PTMCGT1324	I UNIT VALUE INDEX, 1972=100-----	583.11	618.3	651.8	685.8	721.7	759.5	799.5	841.6	886.0	932.7	981.8
47	PTMCGT1324	I % CHANGE-----	0.21	6.0	5.4	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.3
48													
49	TMCGT1324	I VALUE, BILL 728-----	0.931	0.97	1.00	1.05	1.11	1.16	1.22	1.27	1.33	1.38	1.44
50	TMCGT1324	I % CHANGE-----	3.71	3.9	3.6	5.5	5.1	4.9	4.7	4.5	4.3	4.1	3.9

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LINE	VAR LABEL	I	T	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1																
2																
3																
4	IMCGT30T	E				302.0	314.0	325.0	331.5	338.1	344.9	351.8	358.8	366.0	373.3	380.8
5	IMCGT30T	E				0.1	4.0	3.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
6																
7	PUTMCGT30T	E				8.99	9.53	10.05	10.60	11.19	11.80	12.45	13.13	13.86	14.62	15.42
8	PUTMCGT30T	E				2.9	6.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
9																
10	IMCGT30T	I				2.71	2.99	3.27	3.51	3.78	4.07	4.38	4.71	5.07	5.46	5.87
11	IMCGT30T	I				3.11	10.2	9.2	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
12																
13	PUTMCGT30T	I				483.6	512.6	540.6	570.3	601.7	634.8	669.7	706.6	745.4	786.4	829.7
14	PUTMCGT30T	I				3.0	6.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
15																
16	IMCGT30T	I				0.56	0.50	0.60	0.62	0.63	0.64	0.65	0.67	0.68	0.69	0.71
17	IMCGT30T	I				0.1	4.0	3.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
18																
19																
20																
21	IMCGT34	E				100.0	105.0	140.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0	1800.0
22	IMCGT34	E				-0.9	5.0	33.3	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23																
24	PUTMCGT34	E				277.1	306.2	330.7	354.3	377.9	401.5	425.1	448.7	472.3	495.9	520.7
25	PUTMCGT34	E				10.0	10.5	6.0	7.1	6.7	6.2	5.9	5.6	5.3	5.0	5.0
26																
27	IMCGT34S	I				2.77	3.22	4.63	6.38	6.80	7.23	7.65	8.08	8.50	8.93	9.37
28	IMCGT34S	I				9.0	16.0	44.0	17.7	6.7	6.2	5.9	5.6	5.3	5.0	5.0
29																
30	PUTMCGT34	I				592.2	654.4	706.8	757.2	807.7	858.1	908.6	959.0	1009.4	1059.9	1112.9
31	PUTMCGT34	I				10.0	10.5	8.0	7.1	6.7	6.2	5.9	5.6	5.3	5.0	5.0
32																
33	IMCGT34	I				0.47	0.49	0.66	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
34	IMCGT34	I				0.9	5.0	33.3	28.6	0.0	-0.9	0.0	0.0	-0.0	0.0	-0.0

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TABLE 6.10 EXPORTS AND EXPORT DEFLATORS

LINE	VAR LABEL	I	J	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
---CURRENT DOLLARS (BILL)---																
1	I TOTAL GOODS AND SERVICES	206.4	253.0	281.7	311.7	344.8	380.0	413.3	459.6	510.4	562.6	615.3				
2	I MERCHANDISE TOTAL, BOP BASIS	142.1	176.3	195.2	216.1	236.4	264.6	290.5	326.2	363.5	402.5	441.5				
3	E DIFF BETWEEN CENSUS & BOP	-0.6	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4				
4	I MERCHANDISE TOTAL	141.6	175.9	194.8	215.7	236.0	264.2	290.1	325.8	363.1	402.1	441.1				
5	R FOOD & BEVERAGES	21.6	24.2	26.8	29.6	31.7	34.0	36.8	40.3	43.1	46.8	50.7				
6	E AGRIC EXP UNDER PL 480	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6				
7	E CRUDE MATERIALS EXCEPT FUELS	16.9	19.5	19.9	21.5	21.4	26.0	28.7	31.7	34.8	37.8	40.8				
8	I FUELS	3.6	3.9	3.9	4.4	4.8	5.5	6.3	7.0	7.9	8.7	9.7				
9	I MANUFACTURED GOODS	99.5	128.2	144.2	160.2	176.2	198.7	218.3	246.7	277.4	308.8	339.9				
10	I NONAUTO MANUFACTURE	78.9	104.4	117.8	131.8	147.6	164.4	182.4	207.1	234.2	261.9	289.5				
11	E AUTOS & PARTS, END-USE	14.8	17.2	19.3	20.9	22.7	24.6	26.7	29.1	31.4	33.7	36.1				
12	I CIV AIRCRAFT & PARTS, END-USE	5.8	6.6	7.1	7.5	7.9	9.7	9.2	10.5	11.8	13.1	14.4				
13	I SERVICES TOTAL	66.0	77.2	86.1	94.9	105.4	114.1	121.2	131.5	144.7	157.6	171.0				
14	E RECEIPTS ON US INVEST ABROAD	39.7	47.7	53.8	59.2	65.4	69.6	71.9	76.6	84.1	90.8	97.7				
15	E REINVESTED EARNINGS	8.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5				
16	R TRAVEL	7.1	8.1	9.0	9.7	10.9	11.8	12.9	14.1	15.5	17.1	18.8				
17	R TRANSPORT, PASSENGER FARES	1.5	1.6	1.9	2.1	2.5	2.9	3.3	3.8	4.3	4.9	5.5				
18	R TRANSPORTATION, OTHER	7.7	9.1	10.0	11.1	12.2	13.6	15.0	16.7	18.4	20.4	22.3				
19	E OTHER	10.0	10.6	11.4	12.8	14.4	16.2	18.2	20.3	22.4	24.5	26.7				
20	E TRANSFER UNDER US MIL AGENCY	8.2	9.0	9.9	10.2	10.5	10.8	11.1	11.4	11.7	12.0	12.3				
21	E DIFF BETWEEN ROP & NIA	-1.2	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0				
---CONSTANT 1972 DOLLARS---																
22	I TOTAL GOODS AND SERVICES	108.3	125.3	132.7	138.2	144.1	149.7	154.1	162.7	172.1	181.2	189.7				
23	I MERCHANDISE TOTAL, BOP BASIS	73.5	83.1	85.4	89.0	92.4	96.7	100.2	106.6	112.8	119.1	124.7				
24	E DIFF BETWEEN CENSUS & BOP	-0.6	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4				
25	I MERCHANDISE TOTAL	73.3	82.9	85.2	88.8	92.3	96.5	100.1	106.5	112.7	119.0	124.6				
26	R FOOD & BEVERAGES	11.5	12.9	14.1	14.9	15.1	15.4	15.9	16.5	16.8	17.6	18.4				
27	E AGRIC EXP UNDER PL 480	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6				
28	E CRUDE MATERIALS EXCEPT FUELS	1.5	1.4	1.3	1.3	1.3	1.4	1.5	1.6	1.7	1.8	1.9				
29	I FUELS	1.5	1.4	1.3	1.3	1.3	1.4	1.5	1.6	1.7	1.8	1.9				
30	I MANUFACTURED GOODS	52.8	60.9	62.8	65.5	68.6	72.2	74.9	80.4	85.9	91.1	95.5				
31	E RECEIPTS ON US INVEST ABROAD	35.0	41.9	46.5	48.4	50.7	52.0	52.8	54.9	58.0	60.7	63.6				
32	I SERVICES TOTAL	4.4	4.9	5.4	5.2	5.1	4.9	4.8	4.8	4.7	4.6	4.6				
---DEFLATORS (1972=100)---																
33	I TOTAL GOODS AND SERVICES	190.6	201.9	212.2	225.5	239.3	253.8	268.2	282.6	296.6	310.5	324.4				
34	I MERCHANDISE TOTAL	193.3	212.2	228.5	242.8	258.0	273.8	289.9	306.0	322.1	337.9	354.0				
35	R FOODS	188.4	187.1	190.2	198.6	209.2	220.5	231.9	244.6	256.4	266.3	276.1				
36	E AGRIC EXP UNDER PL 480	225.7	259.3	282.0	300.7	322.9	346.2	369.5	395.0	419.7	442.2	463.0				
37	R CRUDE MATERIALS EXCEPT FUELS	239.1	273.2	307.0	339.3	376.4	396.8	420.3	442.8	465.6	489.0	513.0				
38	I FUELS	188.4	210.7	229.5	244.6	259.7	275.2	291.4	307.0	322.8	339.0	355.8				
39	E RECEIPTS ON US INVEST ABROAD	188.4	184.0	185.0	196.2	207.8	219.3	229.6	239.8	249.7	259.5	269.0				
---APPENDIX---																
40	I CPI WTD AVE IN 7 COUNTRIES	162.3	174.7	188.9	199.6	215.7	229.6	244.5	260.4	277.3	295.2	314.4				
41	I FX RATE 7 COUNTRY WTD AVE	110.5	112.0	111.5	111.5	111.5	111.5	111.6	111.6	111.6	111.6	111.6				
42	I IND PROD 7 COUNTRY WTD AVE	127.5	134.6	141.7	148.0	154.5	161.4	168.5	175.9	183.7	191.8	200.3				
43	E WORLD TRADE, PRICE INDEX	225.7	242.6	259.3	278.2	297.3	316.3	336.6	358.2	380.6	404.1	428.3				
44	I EXPI SERVICES & OTHER (1972 \$)	35.0	42.4	47.5	49.4	51.8	53.2	54.1	56.2	59.4	62.2	65.1				
45	I EXPI SERVICES & OTHER (CURR \$)	64.8	77.1	86.9	96.0	106.8	115.8	123.2	133.8	147.3	160.5	174.2				
46	B EXP DEF SERVICES & OTHER	185.1	181.7	183.0	194.3	206.1	217.6	227.9	238.2	246.1	258.0	267.6				

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 8.20 EXPORTS AND EXPORT DEFLATORS, GROWTH RATES

LINE	VAR LABEL	I	E	M	1970	1971	1972	1973	1974	1975	1976	1977	1978
---CURRENT DOLLARS (BILL)---													
1	TOTAL	I			17.6	10.6	10.6	10.6	10.2	11.2	11.0	10.2	9.4
2	TECHNOLOGY	I			17.9	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
3	TECHNOLOGY	I			17.9	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
4	TECHNOLOGY	E			-78.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	TECHNOLOGY	E			20.0	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
6	TECHNOLOGY	E			35.7	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
7	TECHNOLOGY	E			-45.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	TECHNOLOGY	E			19.1	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
9	TECHNOLOGY	E			-14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	TECHNOLOGY	E			18.9	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
11	TECHNOLOGY	E			19.7	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
12	TECHNOLOGY	E			22.3	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
13	TECHNOLOGY	E			2.1	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
14	TECHNOLOGY	E			10.8	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
15	TECHNOLOGY	E			23.7	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
16	TECHNOLOGY	E			20.0	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
17	TECHNOLOGY	E			16.0	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
18	TECHNOLOGY	E			7.9	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
19	TECHNOLOGY	E			10.0	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
20	TECHNOLOGY	E			11.6	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
21	TECHNOLOGY	E			15.8	10.7	10.7	10.7	11.0	12.3	11.4	10.7	9.7
---CONSTANT 1972 DOLLARS---													
22	TOTAL	I			10.2	4.2	4.2	4.2	3.9	5.5	5.8	5.3	4.7
23	TECHNOLOGY	I			8.7	4.2	4.2	4.2	3.9	6.4	5.9	5.6	4.7
24	TECHNOLOGY	I			10.7	4.2	4.2	4.2	3.9	6.4	5.9	5.6	4.7
25	TECHNOLOGY	E			26.3	4.2	4.2	4.2	3.9	3.9	3.9	3.9	3.1
26	TECHNOLOGY	E			17.3	4.2	4.2	4.2	3.9	3.9	3.9	3.9	3.1
27	TECHNOLOGY	E			-23.0	0.0	0.0	0.0	0.0	6.7	6.3	5.9	5.6
28	TECHNOLOGY	E			8.2	4.2	4.2	4.2	3.9	7.9	7.0	6.0	4.9
29	TECHNOLOGY	E			14.2	4.2	4.2	4.2	3.9	3.9	3.9	3.9	3.1
30	TECHNOLOGY	E			11.4	4.2	4.2	4.2	3.9	3.9	3.9	3.9	3.1
31	TECHNOLOGY	E			11.4	4.2	4.2	4.2	3.9	3.9	3.9	3.9	3.1
32	TECHNOLOGY	E			11.4	4.2	4.2	4.2	3.9	3.9	3.9	3.9	3.1
---DEFLATORS (1972=100)---													
33	TOTAL	I			5.9	6.2	6.2	6.1	6.1	5.4	5.0	4.7	4.5
34	TECHNOLOGY	I			5.9	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
35	TECHNOLOGY	I			5.9	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
36	TECHNOLOGY	E			7.4	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
37	TECHNOLOGY	E			1.5	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
38	TECHNOLOGY	E			10.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
39	TECHNOLOGY	E			9.9	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
40	TECHNOLOGY	E			4.0	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
41	TECHNOLOGY	E			12.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
42	TECHNOLOGY	E			12.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
43	TECHNOLOGY	E			12.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
44	TECHNOLOGY	E			12.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
45	TECHNOLOGY	E			12.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
46	TECHNOLOGY	E			12.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
47	TECHNOLOGY	E			12.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
48	TECHNOLOGY	E			12.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
49	TECHNOLOGY	E			12.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5
50	TECHNOLOGY	E			12.8	6.2	6.2	6.2	6.1	5.4	5.0	4.7	4.5

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INTERIM REPORT ON ECONOMIC AND MANPOWER FORECASTING. VOLUME II.(U)  
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TABLE 9.00 IP INDICES, CONSUMER AND WHOLESALE PRICE INDICES (1967=100)

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
CONSUMER PRICE INDICES												
1												
2	B ALL ITEMS	195.3	211.4	227.2	243.5	260.2	277.3	294.4	311.6	328.4	345.2	361.8
3	B	7.6	6.2	7.5	7.2	6.9	6.6	6.2	5.8	5.4	5.1	4.8
4	B											
5												
6	B FOOD	211.2	225.8	242.0	254.7	269.1	284.3	299.7	316.3	332.4	347.7	362.1
7	B	9.9	6.9	7.2	5.3	5.7	5.7	5.4	5.5	5.1	4.6	4.1
8	B SERVICES	210.9	230.4	250.4	267.3	284.9	303.6	322.7	341.9	361.5	382.3	403.6
9	B	8.5	9.3	8.7	6.8	6.6	6.6	6.3	5.9	5.7	5.8	5.6
10	B RENT	164.0	176.7	189.9	200.4	212.5	225.3	237.7	250.4	263.8	276.7	288.3
11	B	6.8	7.7	7.5	5.6	6.0	6.0	5.5	5.4	5.4	4.9	4.2
12												
WHOLESALE PRICE INDICES												
13												
14												
15	B ALL COMMODITIES	208.9	222.1	236.3	249.1	263.1	276.3	289.8	304.2	318.5	332.0	345.0
16	B	7.6	6.3	6.4	5.4	5.6	5.0	4.9	5.0	4.7	4.2	3.9
17												
18	B TOTAL MANUFACTURES, BY DURABILITY	203.9	217.4	229.3	243.6	257.8	272.3	287.4	303.0	318.3	332.9	347.8
19	B	7.2	6.6	5.5	6.2	5.8	5.6	5.6	5.4	5.0	4.6	4.5
20	B FINISHED GOODS, BY PROC. STAGE	194.6	208.7	222.4	234.1	246.6	259.1	271.6	284.6	297.7	310.2	322.5
21	B	7.7	7.3	6.6	5.2	5.4	5.0	4.8	4.8	4.6	4.2	4.0
22	B FTN GOODS BY P. S., CONSUMERS	192.6	206.0	218.0	229.7	241.4	252.9	264.5	276.8	289.1	300.9	312.1
23	B	7.6	7.0	6.2	4.9	5.1	4.8	4.6	4.7	4.4	4.1	3.7
24	B FTN GOODS BY P. S., PRODUCERS	199.2	215.4	231.9	247.0	262.9	278.1	293.4	308.7	323.8	339.0	354.4
25	B	7.9	8.2	7.6	6.9	6.1	5.8	5.5	5.2	4.9	4.7	4.6
26	B CRUDE MATERIALS, BY PROC. STAGE	239.8	252.0	268.4	282.2	300.4	319.0	338.3	361.4	383.5	402.3	418.5
27	B	11.7	5.2	6.5	5.1	6.5	6.2	6.0	6.8	6.1	4.9	4.0
28	B INTERMEDIATE MAT., BY PROC. STAGE	214.9	227.2	241.9	254.8	268.9	281.5	294.2	307.7	321.0	333.9	346.7
29	B	6.5	5.8	6.4	5.3	5.5	4.7	4.5	4.6	4.3	4.0	3.6
30												
FRB INDUSTRIAL PRODUCTION INDEX												
31												
32												
33	B TOTAL	144.9	151.3	154.5	160.5	167.3	173.4	178.7	186.0	193.4	200.1	205.6
34	B	5.7	4.4	2.1	3.9	4.3	3.6	3.1	4.1	4.0	3.5	2.7
35												
36	B MANUFACTURING	145.4	152.3	155.8	161.3	168.0	173.9	179.0	186.2	193.4	199.9	205.1
37	B	6.1	4.8	2.2	3.6	4.1	3.5	3.0	4.0	3.9	3.4	2.6
38	B DURABLES	139.1	146.6	149.5	155.4	162.8	168.9	173.8	181.5	189.0	195.4	199.8
39	B	7.4	5.4	2.0	3.9	4.8	3.7	2.9	4.4	4.2	3.3	2.3
40	B NONDURABLES	154.5	160.5	164.8	169.8	175.4	181.1	186.7	193.0	199.7	206.4	212.8
41	B	4.3	3.9	2.6	3.1	3.3	3.2	3.1	3.4	3.5	3.4	3.1
42	B MINING AND UTILITIES	141.1	143.5	145.4	154.2	162.7	169.6	175.7	183.3	193.2	201.8	209.3
43	B	3.6	1.7	1.3	6.0	5.5	4.3	3.6	4.9	4.8	4.5	3.7
44	B MINING	123.7	124.3	123.7	130.8	137.2	142.1	145.9	152.4	158.7	164.4	169.1
45	B	5.0	0.5	-0.4	5.7	4.9	3.6	2.6	4.5	4.1	3.6	2.8
46	B UTILITIES	160.4	165.0	169.7	180.3	191.1	200.3	208.9	219.9	231.7	243.5	254.2
47	B	2.7	2.9	2.8	6.3	6.0	4.8	4.3	5.3	5.4	5.1	4.4

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TABLE 10.10 REAL OUTPUT (1972 \$)

LINE	VAR LABEL	T	F	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GNP	I			1384.2	1416.7	1438.5	1487.2	1540.4	1585.7	1626.5	1684.4	1740.5	1791.5	1835.4
2															
3	XVCGAG	B			34.9	35.0	34.9	36.5	38.1	39.4	40.4	41.8	43.1	44.5	45.7
4															
5	XVCGHG	I			20.8	21.6	22.0	22.9	23.9	24.8	25.4	26.5	27.5	28.4	29.2
6															
7	XVCGMG10	B			1.2	1.2	1.2	1.3	1.5	1.5	1.5	1.5	1.5	1.6	1.6
8	XVCGMG11+12	B			3.7	3.8	3.9	4.1	4.3	4.5	4.7	4.9	5.2	5.4	5.5
9	XVCGMG13	B			13.3	13.9	14.2	14.7	15.3	15.8	16.2	16.9	17.5	18.1	18.6
10	XVCGMG14	B			2.6	2.6	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.4
11															
12	XVCGMF	I			342.4	356.9	365.0	378.8	395.5	407.8	417.8	434.6	450.5	463.5	473.3
13															
14	XVCGMFD	I			203.4	213.0	217.8	226.5	237.3	244.7	250.4	261.1	271.0	278.5	283.5
15	XVCGMFN	I			139.0	143.9	147.2	152.3	158.1	163.0	167.4	173.5	179.5	185.0	189.8
16															
17	XVCGMT	I			53.1	53.7	53.5	55.2	57.3	59.1	60.5	62.8	65.0	66.9	68.5
18															
19	XVCGMGC48	B			46.0	46.7	51.4	56.4	57.3	60.3	62.9	66.3	70.1	74.3	79.0
20															
21	XVCGMGU49	H			32.1	32.9	33.7	35.1	36.5	37.6	38.5	39.7	41.1	42.5	43.6
22															
23	XVCGCO	I			686.7	697.1	704.3	725.9	751.6	773.3	793.7	821.6	848.5	873.3	894.9
24															
25	XVCGCM	I			478.3	487.4	493.5	515.1	540.8	562.4	583.3	610.9	637.3	661.8	683.1
26	XVCGCC	B			57.8	55.5	52.9	54.1	56.2	57.0	57.5	59.5	60.9	61.5	61.6
27	XVCGFI	I			214.5	221.4	225.1	231.2	239.2	246.9	254.4	263.1	271.6	279.8	287.5
28	XVCGFI65+6	B			161.0	165.3	167.7	171.7	177.4	183.0	188.5	195.6	200.6	206.5	211.9
29	XVCGFI-65+6	B			53.6	56.2	57.4	59.5	61.8	63.9	66.0	68.5	70.9	73.4	75.6
30	XVCGSV	B			168.9	167.3	169.8	175.7	182.5	188.6	194.7	202.2	209.7	217.0	223.9
31	XVCGWH	I			237.0	243.2	245.6	254.1	262.9	270.0	276.7	286.1	295.1	303.3	310.1
32	XVCGWHRS2.9	B			142.0	145.6	146.4	151.1	156.0	160.0	163.8	169.1	174.2	178.9	182.7
33	XVCGWHRS50+1	B			95.0	97.6	99.2	103.0	107.0	110.0	112.9	116.9	120.9	124.4	127.4
34	XVCGWH	B			6.4	9.6	10.9	10.8	10.8	10.8	10.4	10.7	11.2	11.5	11.8
35															
36	XVCGV	I			168.3	170.9	173.8	176.5	180.2	183.6	187.3	191.1	194.6	198.1	201.6
37															
38	XVCGVG	B			149.9	152.9	156.4	158.5	161.5	164.4	167.6	170.7	173.7	176.8	179.9
39	XVCGVFE	B			8.9	8.6	8.3	8.5	8.7	8.8	9.0	9.2	9.4	9.5	9.6
40	XVCGVSE	B			9.6	9.4	9.1	9.5	10.0	10.4	10.8	11.2	11.5	11.8	12.1
41															
42	DUMMY INDUSTRIES														
43															
44	XVCGITM	B			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	XVCGITVA	B			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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TABLE 10.10 REAL OUTPUT (1972 \$)

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	XVGMF	342.4	356.9	365.0	378.8	395.5	407.6	417.6	434.6	450.5	463.5	473.3
2												
3	XVGMFD	203.4	213.0	217.6	226.5	237.3	244.7	250.4	261.1	271.0	278.5	283.5
4												
5	XVGMFD24	10.0	10.4	10.6	11.3	12.0	12.4	12.7	13.1	13.9	14.5	15.1
6	XVGMFD25	5.2	5.4	5.6	5.8	6.1	6.2	6.4	6.6	7.1	7.3	7.4
7	XVGMFD32	10.8	11.3	11.6	11.7	12.1	12.4	12.7	13.3	13.8	14.2	14.4
8	XVGMFD33	20.8	21.8	22.2	22.8	23.8	24.2	24.0	24.5	24.8	24.6	24.2
9	XVGMFD34	21.0	21.9	22.4	23.2	24.1	24.7	25.2	26.1	26.9	27.4	27.7
10	XVGMFD35	37.6	39.4	40.9	42.8	45.2	46.8	48.0	50.3	52.3	53.8	54.7
11	XVGMFD36	32.7	34.9	35.1	36.6	38.3	39.8	41.1	43.0	44.9	46.5	47.9
12	XVGMFD37	34.8	35.4	36.5	38.2	40.2	41.7	42.8	45.0	46.9	48.4	49.4
13	XVGMFD38	9.1	9.6	9.9	10.3	10.8	11.2	11.6	12.1	12.6	13.1	13.4
14	XVGMFD39	21.4	22.8	23.9	25.0	26.8	28.4	29.9	32.9	27.9	28.7	29.3
15	XVGMFD3SP1	15.9	17.0	17.1	17.8	18.5	18.9	19.3	20.0	20.6	21.4	21.8
16	XVGMFD39	5.4	5.7	5.8	6.0	6.2	6.4	6.6	6.9	7.1	7.3	7.5
17												
18	XVGMFN	139.0	143.9	147.2	152.3	158.1	163.0	167.4	173.5	179.5	185.0	189.8
19												
20	XVGMFN20	32.7	33.5	33.8	34.4	35.3	36.1	36.9	37.7	38.5	39.3	40.0
21	XVGMFN21	4.9	5.0	5.1	5.3	5.4	5.6	5.8	6.0	6.3	6.6	6.8
22	XVGMFN22	10.0	10.4	10.5	10.9	11.4	11.8	12.1	12.5	12.9	13.3	13.6
23	XVGMFN23	12.5	12.9	13.3	13.8	14.3	14.7	16.1	15.7	16.2	16.8	17.3
24	XVGMFN26	12.8	13.3	13.7	14.3	15.0	15.6	16.1	16.7	17.4	18.0	18.5
25	XVGMFN27	16.9	17.7	18.5	19.1	19.8	20.3	20.8	21.6	22.3	23.0	23.6
26	XVGMFN28	27.2	28.1	28.8	29.9	31.3	32.5	33.6	35.1	36.6	38.0	39.3
27	XVGMFN29	9.0	9.4	9.7	10.0	10.3	10.5	10.7	11.1	11.4	11.8	12.0
28	XVGMFN30	10.7	11.1	11.5	12.0	12.6	13.1	13.5	14.2	14.8	15.3	15.7
29	XVGMFN31	2.4	2.5	2.6	2.7	2.7	2.8	2.8	2.9	2.9	3.0	3.0
30												
31	XVGRGT	53.1	53.7	53.5	55.2	57.3	59.1	60.5	62.8	65.0	66.9	68.5
32												
33	XVGRGT41	2.9	2.7	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.5
34	XVGRGT42	24.2	24.6	24.7	25.5	26.5	27.3	28.0	29.0	30.0	30.9	31.5
35	XVGRGT40	9.8	9.9	9.9	10.1	10.5	10.7	10.9	11.2	11.6	11.8	12.0
36	XVGRGT44	3.3	3.3	3.3	3.3	3.4	3.5	3.6	3.7	3.8	4.0	4.1
37	XVGRGT45	9.9	10.2	10.2	10.7	11.3	11.8	12.3	12.8	13.4	14.0	14.4
38	XVGRGT46	1.2	1.2	1.1	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.6
39	XVGRGT47	1.8	1.8	1.8	1.8	1.9	2.0	2.1	2.1	2.2	2.3	2.4

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LINE		VAR LABEL	TABLE 10-20 REAL OUTPUT, GROWTH RATES										
			I T E M										
			1976	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	I	GNP	3.9	2.3	1.5	3.4	3.6	2.9	2.6	3.6	3.3	2.9	2.5
2													
3	X	VAGAG	-9.0	0.4	-0.3	4.5	4.4	3.4	2.6	3.5	3.2	3.1	2.8
4													
5	X	VAGMG	4.8	3.5	2.1	3.9	4.7	3.4	2.8	4.2	3.8	3.4	2.7
6													
7	X	VAGMG10	6.7	-0.5	3.4	7.0	9.2	5.8	-1.5	1.7	-0.1	1.1	1.1
8	X	VAGMG11+12	5.9	4.2	2.2	5.0	5.8	4.5	3.7	5.2	4.6	3.8	3.1
9	X	VAGMG13	4.3	4.6	2.1	3.6	4.0	2.9	2.5	4.2	3.9	3.5	2.7
10	X	VAGMG14	5.6	-1.3	1.9	2.7	4.1	5.4	2.7	4.4	4.0	3.3	2.8
11													
12	X	VAGMF	6.2	4.2	2.3	3.8	4.4	3.1	2.5	4.0	3.6	2.9	2.1
13													
14	X	VAGMFD	6.6	4.7	2.3	4.0	4.8	3.1	2.3	4.3	3.8	2.8	1.8
15	X	VAGMFN	5.8	3.5	2.3	3.5	3.8	3.1	2.7	3.7	3.5	3.1	2.6
16													
17	X	VAGRGT	2.2	1.2	-0.5	3.3	3.9	3.0	2.9	3.8	3.5	2.9	2.4
18													
19	X	VAGRGCE48	9.4	6.1	5.4	9.8	1.6	5.3	4.2	5.4	5.8	5.9	6.4
20													
21	X	VAGRGU49	6.8	2.3	2.3	4.2	4.2	2.9	2.9	3.2	3.5	3.3	2.5
22													
23	X	VAGCEN	4.8	1.8	1.0	3.1	3.5	2.9	2.6	3.5	3.3	2.9	2.5
24													
25	X	VAGCM	4.7	1.3	0.9	3.1	3.6	2.9	2.7	3.5	3.3	2.9	2.5
26	X	VAGCC	3.8	-4.0	-4.6	2.3	3.6	1.4	0.9	3.5	2.4	0.9	0.1
27	X	VAGFI	4.5	3.2	1.7	2.7	3.5	3.2	3.1	3.4	3.2	3.0	2.7
28	X	VAGFI65+6	5.1	2.7	1.5	2.4	3.3	3.1	3.0	3.3	3.1	2.9	2.6
29	X	VAGFI-65+6	3.0	4.9	2.1	3.7	3.6	3.4	3.3	3.8	3.6	3.4	3.0
30	X	VAGSV	6.2	-0.9	1.5	3.5	3.8	3.4	3.2	3.8	3.7	3.5	3.2
31	X	VAGWR	4.0	2.6	1.0	3.4	3.5	2.7	2.8	3.4	3.2	2.8	2.2
32	X	VAGWRH52.9	5.6	2.5	0.6	3.2	3.2	2.6	2.4	3.3	3.0	2.7	2.1
33	X	VAGWRH50+1	1.7	2.7	1.7	3.8	3.8	2.9	2.6	3.6	3.4	2.9	2.4
34	X	VAGWR	14.3	14.9	12.5	-0.9	0.4	0.4	-3.9	2.8	4.1	3.2	2.5
35													
36	X	VAGGV	1.6	1.5	1.7	1.6	2.1	1.9	2.0	2.0	1.9	1.8	1.7
37													
38	X	WAGGVG	1.8	2.0	2.3	1.3	1.9	1.8	1.9	1.9	1.8	1.8	1.8
39	X	VAGGVIE	-2.8	-2.7	-3.7	2.1	2.5	1.9	1.7	2.2	2.0	1.3	0.8
40	X	VAGGVSE	1.7	-1.8	-3.6	4.7	5.0	4.1	3.5	3.8	3.3	2.7	2.1

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TABLE 10.20 REAL OUTPUT, GROWTH RATES

LINE	VAR LABEL	I	J	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	XVGMF	1				6.21	4.2	2.3	3.8	4.4	3.1	2.5	4.0	3.6	2.9	2.1
2																
3	XVGMFD	1				6.61	4.7	2.3	4.0	4.0	3.1	2.3	4.3	3.0	2.0	1.8
4																
5	XVGMFD24	8				8.01	4.0	3.0	4.7	5.7	3.5	2.3	3.6	3.6	4.7	3.9
6	XVGMFD25	8				5.01	4.1	3.6	2.7	4.0	3.1	3.2	5.3	4.1	2.7	1.6
7	XVGMFD12	8				4.01	4.7	2.4	1.3	3.1	2.5	2.3	4.6	3.9	2.8	1.9
8	XVGMFD13	8				3.01	4.7	1.7	3.0	4.2	1.7	-0.6	2.1	1.0	-0.7	-
9	XVGMFD14	8				4.51	4.6	2.2	3.4	4.2	2.5	1.7	3.7	3.0	2.1	1.1
10	XVGMFD15	8				7.71	5.0	3.6	4.7	5.5	3.5	2.7	4.7	4.1	2.9	1.7
11	XVGMFD16	8				8.51	6.6	0.7	4.1	4.8	3.9	3.4	4.6	4.3	3.6	3.0
12	XVGMFD17	8				8.01	1.7	3.1	4.7	5.4	3.5	2.9	5.1	4.3	3.2	2.0
13	XVGMFD18	8				4.81	5.5	2.6	4.2	5.0	3.7	3.2	3.9	3.5	3.5	2.7
14	XVGMFD17SP2	1				4.91	6.6	0.7	3.8	4.0	2.5	2.1	3.9	3.5	2.9	2.1
15	XVGMFD17SP1	8				5.51	7.0	0.6	3.9	3.9	2.2	2.0	3.9	3.5	2.9	2.0
16	XVGMFD19	8				3.11	5.5	1.1	3.4	4.1	3.2	2.3	4.0	3.6	2.9	2.3
17																
18	XVGMFN	1				5.81	3.5	2.3	3.5	3.8	3.1	2.7	3.7	3.5	3.1	2.6
19																
20	XVGMFN20	8				4.01	2.5	-0.0	2.7	2.8	3.3	2.0	2.3	2.2	2.0	1.8
21	XVGMFN21	8				3.41	2.2	1.5	3.1	3.5	3.1	2.6	4.5	4.6	4.2	3.5
22	XVGMFN22	8				4.61	3.6	1.6	4.0	4.2	3.2	2.6	3.0	3.3	2.7	2.2
23	XVGMFN23	8				9.31	3.5	2.6	3.7	3.6	3.0	2.9	3.7	3.5	3.3	2.9
24	XVGMFN26	8				7.41	4.5	2.7	4.3	5.0	4.0	2.9	4.3	4.0	3.4	2.8
25	XVGMFN27	8				7.11	5.0	4.0	3.0	3.4	2.8	2.7	3.5	3.4	3.1	2.6
26	XVGMFN28	8				6.51	3.4	2.7	3.6	4.5	3.9	3.3	4.6	4.3	3.8	3.3
27	XVGMFN29	8				3.41	3.8	3.1	3.1	3.3	2.4	2.0	3.3	3.2	2.9	2.3
28	XVGMFN10	8				3.11	3.4	3.7	4.7	5.1	3.6	3.2	4.7	4.2	3.5	2.7
29	XVGMFN11	8				6.61	5.6	2.6	2.2	2.0	1.6	1.4	2.1	2.1	2.0	1.9
30																
31	XVGRGT	1				2.21	1.2	-0.5	3.3	3.9	3.0	2.5	3.8	3.5	2.9	2.4
32																
33	XVGRGT41	8				-14.11	-6.4	-6.7	-1.2	-0.4	-0.6	-1.0	0.2	0.4	0.1	4.7
34	XVGRGT42	8				4.41	1.7	0.1	3.3	3.9	3.0	2.6	3.8	3.4	2.7	2.1
35	XVGRGT40	8				0.31	0.5	-0.2	2.7	3.5	2.1	1.3	3.3	3.2	2.2	1.3
36	XVGRGT44	8				4.01	1.0	-2.0	2.5	3.0	2.3	1.6	3.6	3.6	3.0	2.4
37	XVGRGT45	8				3.71	2.8	0.3	4.9	5.1	4.5	4.0	4.7	4.5	4.0	3.4
38	XVGRGT46	8				-1.01	1.0	-2.2	5.5	5.2	4.1	3.4	4.5	4.4	3.9	3.2
39	XVGRGT47	8				5.21	1.0	-0.7	3.1	4.2	3.5	3.0	4.3	4.0	3.4	2.6

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TABLE 11.10 REAL OUTPUT PER PERSON (THOU 1972 \$ / PERSON)

LINE	VAR LABEL	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GUPPP	I ALL INDUSTRIES	14.7	14.7	14.7	14.9	15.2	15.4	15.6	15.9	16.2	16.4	16.6
2													
3	XAGPP	FARM	10.5	11.1	11.4	11.8	12.2	12.6	12.9	13.4	13.8	14.4	14.9
4													
5	XMGPP	MINING	24.1	24.3	25.5	27.0	28.4	29.5	30.3	31.3	32.1	32.8	33.3
6													
7	XMEPP	MANUFACTURING	16.9	17.2	17.5	18.1	18.7	19.2	19.7	20.3	20.9	21.4	21.9
8													
9	XMPDPP	DURABLE GOODS	16.9	17.1	17.3	17.8	18.4	18.8	19.2	19.6	20.3	20.8	21.2
10													
11	XMPD24PP	LUMBER	15.0	15.5	16.1	16.6	17.2	17.5	17.7	18.1	18.8	19.3	19.7
12	XMPD25PP	FURNITURE	9.8	10.0	10.2	10.4	10.6	11.0	11.3	11.7	12.1	12.3	12.4
13	XMPD12PP	STONE, CLAY AND GLASS	15.6	15.7	15.8	16.0	16.5	16.8	17.2	17.6	18.2	18.4	18.7
14	XMPD13PP	PRIMARY METALS	16.6	17.1	17.4	17.7	18.2	18.3	18.3	18.7	18.9	19.0	19.0
15	XMPD14PP	FABRICATED METAL PRODUCTS	13.7	13.9	14.0	14.3	14.6	14.8	15.0	15.4	15.7	15.9	16.1
16	XMPD15PP	NONMETAL MINING	16.4	16.8	17.0	17.5	18.1	18.5	18.6	19.3	19.7	20.0	20.3
17	XMPD16PP	ELECTRICAL MACHINERY	16.0	16.4	16.6	17.0	17.5	18.0	18.0	19.7	20.4	21.1	21.7
18	XMPD17PP	MOTOR VEHICLES	36.1	35.8	36.5	37.7	39.8	40.7	42.0	43.9	45.6	47.5	49.1
19	XMPD17SP2PP	NONAUTO TRAN EQ + ORD. & MISC MFG	13.8	14.2	14.2	14.6	15.0	15.2	15.5	16.0	16.4	16.7	17.1
20	XMPD18PP	INSTRUMENTS	16.5	16.8	17.0	17.5	18.0	18.5	18.9	19.6	20.1	20.6	21.0
21													
22	XMFNPP	NONDURABLE GOODS	17.0	17.4	17.8	18.4	19.2	19.8	20.4	21.1	21.9	22.5	23.1
23													
24													
25	XMFN20PP	FOOD AND BEVERAGE	18.7	19.5	19.7	20.5	21.4	22.4	23.2	24.1	24.8	25.4	26.0
26	XMFN21PP	TOBACCO	69.7	71.5	72.7	75.4	78.7	84.0	85.3	90.0	95.1	100.2	104.9
27	XMFN22PP	TEXTILES	10.1	10.4	10.6	11.0	11.4	11.7	12.0	12.4	12.8	13.1	13.4
28	XMFN23PP	APPAREL	9.6	9.9	10.1	10.5	10.9	11.3	11.7	12.3	12.6	13.4	14.0
29	XMFN26PP	PAPER	17.9	18.4	18.7	19.3	20.1	20.8	21.4	22.2	23.1	23.9	24.7
30	XMFN27PP	PRINTING AND PUBLISHING	15.0	15.4	16.0	16.3	16.8	17.1	17.3	17.7	18.1	18.4	18.6
31	XMFN28PP	CHEMICALS	25.4	26.1	26.7	28.1	29.6	30.9	32.0	33.5	34.9	36.2	37.4
32	XMFN29PP	PETROLEUM	42.7	43.1	43.7	45.2	47.0	48.6	50.1	52.7	55.3	57.9	60.5
33	XMFN30PP	RUBBER	15.6	15.8	16.1	16.5	17.0	17.3	17.6	18.1	18.5	18.9	19.2
34	XMFN31PP	LEATHER	8.8	9.0	9.1	9.3	9.5	9.7	9.9	10.3	10.6	10.9	11.2
35													
36	XRCPP	REGULATED INDUSTRIES	27.9	28.3	29.0	30.3	31.2	32.1	33.0	34.0	34.9	35.8	36.9
37													
38	XRC2PP	TRANSPORTATION	19.7	19.6	19.5	20.0	20.5	20.9	21.3	21.8	22.2	22.4	22.6
39													
40	XRC248PP	COMMUNICATIONS	36.8	38.7	40.9	42.9	44.1	46.3	48.3	50.2	51.8	53.8	56.5
41													
42	XRC249PP	UTILITIES	41.9	42.2	43.5	45.7	47.6	49.3	50.5	51.9	53.9	56.0	57.9
43													
44	XCCPP	COMMERCIAL AND OTHER	13.9	13.7	13.6	13.6	13.7	13.8	13.9	14.2	14.3	14.5	14.6
45	XCCPP	CONTRACT CONSTRUCTION	13.6	12.7	12.1	11.9	12.0	12.1	12.1	12.5	12.7	12.7	12.7
46	XFTPP	FINANCE, INSURANCE & REAL ESTATE	45.3	45.1	44.6	44.1	44.4	45.1	45.9	46.8	47.7	48.5	49.2
47	XSVPP	SERVICES	10.5	10.1	10.0	9.9	10.0	10.1	10.1	10.2	10.3	10.4	10.5
48	XW8PP	WHOLESALE AND RETAIL TRADE	12.4	12.4	12.4	12.6	12.8	12.9	13.0	13.3	13.5	13.6	13.7
49													
50	XGVPP	GOVERNMENT	10.8	10.7	10.6	10.7	10.8	10.8	10.9	10.9	10.9	11.0	11.0

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 11.20 REAL OUTPUT PER PERSON, % CHANGE

LINE	VAR LABEL	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GNPPP	ALL INDUSTRIES	-0.2	0.1	0.1	1.4	1.8	1.4	1.2	2.0	1.8	1.4	1.2
2	XAGPP	FARM	-10.8	5.0	2.9	4.1	3.3	2.7	2.6	3.7	3.6	3.6	3.6
3	XMGPP	MINING	1.0	0.5	5.1	5.8	5.3	3.6	2.7	3.5	2.6	2.0	1.6
4	XMGPP	MANUFACTURING	2.5	2.1	1.5	3.2	3.6	2.7	2.4	3.3	2.9	2.5	2.2
5	XMGPP	DURABLE GOODS	1.3	1.6	1.2	2.9	3.3	2.2	2.0	3.1	2.7	2.2	1.9
6	XMGPP	LUMBER	1.9	3.2	4.1	3.1	3.5	1.7	0.9	2.3	3.9	2.7	2.1
7	XMGPP	FURNITURE	1.0	1.9	2.3	2.2	3.4	2.4	2.6	3.5	3.5	1.5	0.8
8	XMGPP	STONE, CLAY AND GLASS	-2.0	0.4	0.6	1.5	2.8	2.1	2.3	3.3	2.2	1.5	1.3
9	XMGPP	PRIMARY METALS	-0.1	2.7	1.6	2.3	2.4	0.8	-0.1	2.0	1.1	0.4	0.2
10	XMGPP	FABRICATED METAL PRODUCTS	-1.0	1.7	0.6	1.9	2.3	1.4	1.4	2.5	1.9	1.5	1.3
11	XMGPP	NONFABRICATED METAL PRODUCTS	2.9	2.1	1.4	3.1	3.5	1.9	1.8	2.6	1.9	1.5	1.5
12	XMGPP	ELECTRICAL MACHINERY	2.7	2.4	-0.0	3.8	4.0	3.5	3.3	3.9	3.6	3.4	3.2
13	XMGPP	NON-ELECTRICAL MACHINERY	0.5	-0.8	2.0	3.3	4.6	3.3	3.1	4.7	4.1	3.8	3.3
14	XMGPP	MOTOR VEHICLES	0.4	2.6	0.5	2.5	2.5	1.9	2.0	2.6	2.4	2.2	2.0
15	XMGPP	NON-AUTO TRAN. EQ. & MISC. MFD	-0.2	1.7	1.0	3.0	3.3	2.6	2.4	3.2	2.7	2.3	2.0
16	XMGPP	INSTRUMENTS	4.2	2.8	2.0	3.6	3.9	3.3	3.0	3.7	3.4	3.0	2.7
17	XMGPP	NON-DURABLE GOODS	3.3	4.0	1.2	4.0	4.6	4.4	3.8	3.6	3.0	2.6	2.1
18	XMGPP	FOOD AND BEVERAGE	2.6	2.6	1.7	3.7	4.4	4.1	4.0	5.6	5.6	5.3	4.7
19	XMGPP	TORACCO	3.2	2.9	2.1	3.9	3.8	2.9	2.4	3.5	3.0	2.6	2.2
20	XMGPP	TEXTILES	8.0	2.7	2.4	3.8	4.0	3.3	3.8	4.6	4.5	4.5	4.3
21	XMGPP	APPAREL	5.2	2.6	1.7	3.5	4.1	3.3	2.7	4.1	3.9	3.5	3.2
22	XMGPP	PRINTING AND PUBLISHING	5.7	2.9	3.6	2.1	2.7	1.9	1.6	2.2	1.9	1.6	1.2
23	XMGPP	CHEMICALS	5.4	2.7	2.3	5.2	5.3	4.4	3.7	4.7	4.2	3.7	3.3
24	XMGPP	PETROLEUM	2.5	0.9	1.4	3.5	4.0	3.4	3.4	4.9	4.9	4.8	4.4
25	XMGPP	RUBBER	1.1	1.6	1.4	3.0	2.9	1.9	1.6	2.8	2.3	1.9	1.6
26	XMGPP	LEATHER	2.9	2.5	0.7	2.0	2.3	2.3	2.5	3.2	3.1	3.1	3.0
27	XMGPP	REGULATED INDUSTRIES	3.1	1.6	2.4	4.5	2.9	3.1	2.7	3.1	2.7	2.4	1.2
28	XMGPP	TRANSPORTATION	1.7	-0.6	-0.6	2.7	2.7	1.9	1.7	2.5	1.6	0.7	1.3
29	XMGPP	COMMUNICATIONS	2.1	5.1	5.7	5.0	2.9	5.0	4.4	3.9	3.2	3.8	5.1
30	XMGPP	UTILITIES	3.5	0.8	3.0	5.0	4.8	3.1	2.4	2.7	3.9	3.8	3.4
31	XMGPP	COMMERCIAL AND OTHER	-0.2	-1.3	-0.8	0.0	1.1	0.8	0.7	1.6	1.3	1.0	0.6
32	XMGPP	CONTRACT CONSTRUCTION	-6.0	-6.8	-4.5	-1.7	1.1	0.1	0.1	3.1	1.7	0.3	-0.3
33	XMGPP	FINANCE, INSURANCE & REAL ESTATE	-0.5	-0.4	-1.3	-1.0	0.7	1.6	1.7	2.1	1.9	1.7	1.4
34	XMGPP	SERVICES	1.3	-0.3	-0.6	-0.5	0.7	0.5	0.4	1.1	1.0	0.8	0.5
35	XMGPP	WHOLESALE AND RETAIL TRADE	-0.2	-0.3	0.1	1.4	1.7	1.0	0.9	1.8	1.5	1.2	0.7
36	XMGPP	GOVERNMENT	-1.1	-0.4	-0.8	0.5	0.7	0.5	0.4	0.4	0.3	0.2	0.2

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TABLE 12.10 NOMINAL OUTPUT (CURRENT \$)

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GNPS	I ALL INDUSTRIES	2105.7	21308.1	2492.2	2754.9	5044.6	3315.5	3628.3	3975.3	4328.6	4682.8	5031.3
2	XVGSUMS	I SUM OF NOMINAL OUTPUTS	2103.5	21305.1	2489.2	2751.9	5041.6	3312.5	3625.3	3972.3	4325.6	4679.8	5028.4
3	4 SOS	F STATISTICAL DISCREPANCY	2.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
4	XVGAGS	I AGRIC, FORESTRY AND FISHERIES	62.1	63.9	67.7	73.1	80.9	88.9	96.9	108.1	119.2	128.6	136.5
5	XVGMGS	I MINING	63.3	76.7	87.8	101.5	116.6	131.5	145.1	161.1	177.6	194.0	210.0
6	XVGMFS	I MANUFACTURING	510.1	587.8	613.0	675.2	742.3	805.4	867.6	945.7	1023.9	1098.4	1169.6
7	XVGMFDS	I DURABLE GOODS	314.0	351.0	383.2	426.8	475.1	519.1	561.9	617.4	672.7	724.5	772.8
8	XVGMF24S	I LUMBER	16.4	17.7	19.0	20.8	21.1	25.5	27.6	30.7	34.2	37.2	40.4
9	XVGMF25S	I FURNITURE	7.9	8.7	9.5	10.3	11.2	12.0	12.9	14.0	14.9	15.9	16.9
10	XVGMF12S	I STONE, CLAY AND GLASS	17.6	19.5	21.2	23.4	25.2	26.4	27.9	30.0	32.1	34.1	36.0
11	XVGMF13S	I PRIMARY METALS	36.5	40.8	43.5	47.7	52.7	57.1	60.2	64.4	68.2	71.1	73.1
12	XVGMF14S	I FABRICATED METAL PRODUCTS	35.9	39.9	42.9	47.9	53.1	58.0	62.7	68.8	74.8	80.4	85.5
13	XVGMF15S	I NONELECTRICAL MACHINERY	60.6	67.9	75.3	84.6	95.5	105.6	115.4	128.2	141.3	153.5	164.6
14	XVGMF16S	I ELECTRICAL MACHINERY	48.3	54.9	59.4	66.6	73.7	80.0	86.4	94.2	101.8	109.1	116.4
15	XVGMF17S	I MOTOR VEHICLES	44.2	48.6	54.3	61.6	70.0	77.9	85.9	94.4	107.0	117.2	126.5
16	XVGMF18S	I INSTRUMENTS	12.6	14.2	15.5	17.2	18.9	20.6	22.4	24.5	26.6	28.7	30.7
17	XVGMF19S	I NONAUTO TRANS EQ + ORD + MIS	34.0	39.0	42.3	46.8	51.6	56.1	60.6	66.3	71.9	77.4	82.7
18	XVGMF20S	I NONAUTO TRANS EQUIP + ORD	26.3	30.3	32.9	36.5	40.2	43.6	47.0	51.4	55.7	59.9	64.0
19	XVGMF21S	I MISCELLANEOUS MANUFACTURING	7.7	8.7	9.4	10.3	11.4	12.5	13.6	14.9	16.2	17.5	18.7
20	XVGMF22S	I NONDURABLE GOODS	196.2	216.7	229.9	248.4	267.3	286.3	305.7	328.3	351.2	373.9	396.8
21	XVGMF23S	I FOOD AND BEVERAGES	44.2	47.9	50.0	52.2	58.5	57.1	59.7	62.9	66.2	69.7	73.5
22	XVGMF24S	I TOBACCO	6.0	6.6	7.0	7.5	8.1	8.7	9.3	10.0	10.7	11.4	12.1
23	XVGMF25S	I TEXTILES	14.0	15.4	16.4	17.9	19.9	21.1	22.0	24.6	26.5	28.4	30.1
24	XVGMF26S	I APPAREL	15.3	16.8	17.9	19.4	21.1	22.7	24.4	26.1	27.9	29.7	31.4
25	XVGMF27S	I PAPER	20.1	22.8	24.6	26.6	29.0	31.6	34.2	37.0	39.9	42.8	45.8
26	XVGMF28S	I PRINTING AND PUBLISHING	25.1	27.9	29.7	32.7	35.6	38.7	42.0	45.6	49.4	53.3	57.4
27	XVGMF29S	I CHEMICALS	40.0	44.5	47.2	51.3	55.2	58.7	62.2	67.0	71.6	76.0	80.2
28	XVGMF30S	I PETROLEUM	13.1	14.8	15.7	17.4	18.9	20.3	21.6	23.1	24.7	26.1	27.5
29	XVGMF31S	I RUBBER	15.0	16.6	17.8	19.5	21.3	23.0	24.8	27.0	29.0	31.0	32.9
30	XVGMF32S	I LEATHER	3.1	3.6	3.6	3.9	4.2	4.4	4.7	5.0	5.3	5.5	5.8
31	XVGMF33S	I COMMERCIAL AND OTHER	1026.4	1120.6	1208.5	1341.8	1493.7	1646.3	1800.3	1979.7	2162.1	2346.7	2528.9
32	XVGRGTS	I TRANSPORTATION	77.7	82.9	87.2	93.1	99.9	107.1	114.6	123.3	132.7	143.2	153.4
33	XVGRGU9S	I UTILITIES	52.9	58.1	64.4	72.1	79.7	87.0	95.1	104.6	114.4	123.9	132.6
34	XVGRGCRS	I COMMUNICATIONS	55.4	59.8	64.4	72.0	74.7	80.2	85.3	91.6	98.7	106.4	115.1
35	XVGGVS	I GOVERNMENT AND GOV. ENTERPRISES	255.6	275.4	296.2	323.1	353.8	386.1	420.5	458.1	497.1	538.6	582.2
36	XVGRGVS	I GENERAL GOVERNMENT	226.6	245.4	265.6	289.2	315.9	344.3	374.7	407.6	441.6	478.3	517.5
37	XVGGVFS	I FEDERAL ENTERPRISES	15.4	15.8	16.2	17.9	19.8	21.6	23.5	26.0	28.7	31.4	33.6
38	XVGGVFS	I STATE AND LOCAL ENTERPRISES	13.5	14.1	14.3	16.1	18.1	20.2	22.2	24.5	26.8	29.0	31.1

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TABLE 12.20 NOMINAL OUTPUT, GROWTH RATES

LINE	VAR LABEL	I T F M	1979	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GNPS	I ALL INDUSTRIES	11.61	9.6	8.0	10.5	10.5	9.6	8.8	9.6	8.9	8.2	7.4
2	XVCSUMS	I SUM OF NOMINAL OUTPUTS	11.71	9.6	8.0	10.6	10.5	9.6	8.8	9.6	8.9	8.2	7.4
3	XVCGS	I AGRIC, FORESTRY AND FISHERIES	10.41	2.8	6.0	8.0	10.6	9.9	9.0	11.6	10.2	8.0	6.1
4	XVCMGS	I MINING	27.31	21.3	14.4	15.6	14.9	12.0	10.3	11.1	10.2	9.3	8.3
5	XVCMFS	I MANUFACTURING	13.01	11.3	8.0	10.1	10.0	8.5	7.7	9.0	8.3	7.3	6.5
6	XVCMFD1	I DURABLE GOODS	15.41	11.8	9.2	11.4	11.3	9.3	8.2	9.9	9.0	7.7	6.7
7	XVCMFD2	I LUMBER	15.31	7.7	7.7	9.2	11.4	10.1	8.3	11.2	11.4	8.6	8.6
8	XVCMFD3	I FURNITURE	16.61	10.0	9.3	8.2	8.5	7.5	7.2	8.6	6.8	6.9	6.0
9	XVCMFD4	I STONE, CLAY AND GLASS	20.11	10.4	8.8	10.4	7.9	4.9	5.4	7.6	7.1	6.3	5.6
10	XVCMFD5	I PRIMARY METALS	7.31	11.7	6.8	9.5	10.6	8.3	5.4	6.9	6.0	4.2	2.8
11	XVCMFD6	I FABRICATED METAL PRODUCTS	16.61	10.9	7.6	11.7	10.9	9.1	8.2	9.7	8.6	7.5	6.4
12	XVCMFD7	I NONELECTRICAL MACHINERY	17.21	12.2	10.9	12.3	12.9	10.5	9.4	11.1	10.2	8.6	7.2
13	XVCMFD8	I ELECTRICAL MACHINERY	16.71	13.7	8.6	11.8	10.6	8.6	8.0	9.0	8.1	7.2	6.7
14	XVCMFD9	I MOTOR VEHICLES	17.31	9.9	11.9	13.3	13.7	11.3	10.2	12.3	11.0	9.5	8.0
15	XVCMFD10	I INSTRUMENTS	8.91	12.7	9.2	10.8	10.4	8.9	8.5	9.7	8.5	7.0	7.1
16	XVCMFD11	I NONAUTO TRANS EQ + ORD + MISC	13.11	14.7	8.5	10.9	10.3	8.6	8.1	9.3	8.4	7.6	6.9
17	XVCMFD12	I NONAUTO TRANS EQUIP + ORD	13.61	15.3	8.5	11.1	10.1	8.3	7.9	9.3	8.4	7.6	6.9
18	XVCMFD13	I MISCELLANEOUS MANUFACTURING	11.51	12.6	8.4	9.9	10.8	9.7	8.6	9.5	8.7	7.8	7.1
19	XVCMFN1	I NONDURABLE GOODS	9.31	10.5	6.1	8.1	7.6	7.1	6.8	7.4	7.0	6.4	6.1
20	XVCMFN2	I FOOD AND BEVERAGES	7.91	8.5	4.3	4.4	4.5	4.7	4.6	5.2	5.4	5.2	5.5
21	XVCMFN3	I TOBACCO	6.81	10.4	6.0	7.4	7.5	7.1	6.7	7.6	7.2	6.9	6.2
22	XVCMFN4	I TEXTILES	8.51	10.0	7.0	9.0	8.7	8.4	7.9	8.2	7.7	6.9	6.0
23	XVCMFN5	I APPAREL	12.61	9.3	6.5	8.7	8.4	7.9	7.5	7.0	6.9	6.3	5.8
24	XVCMFN6	I PAPER	10.81	13.5	7.8	8.3	8.8	9.1	8.2	8.2	7.8	7.3	6.9
25	XVCMFN7	I PRINTING AND PUBLISHING	11.81	11.3	6.4	10.0	9.0	8.7	8.4	8.7	8.3	8.0	7.7
26	XVCMFN8	I CHEMICALS	9.91	11.2	6.0	8.6	7.7	6.3	6.1	7.6	6.9	6.1	5.6
27	XVCMFN9	I PETROLEUM	7.21	11.0	6.6	10.3	8.8	7.1	6.3	7.3	6.5	5.7	5.4
28	XVCMFN10	I RUBBER	6.21	10.5	6.9	10.0	9.3	7.8	7.5	8.9	7.7	6.8	6.3
29	XVCMFN11	I LEATHER	9.31	9.6	4.8	7.9	7.6	6.5	5.9	6.1	5.5	5.0	5.0
30	XVCMFN12	I COMMERCIAL AND OTHER	11.21	9.2	7.8	11.0	11.3	10.2	9.8	10.0	9.2	8.5	7.8
31	XVCMFN13	I TRANSPORTATION	9.91	6.7	5.2	6.8	7.2	7.2	7.0	7.6	7.7	7.9	7.2
32	XVCMFN14	I UTILITIES	12.91	9.0	10.8	11.9	10.6	9.2	9.2	10.0	9.3	8.3	7.0
33	XVCMFN15	I COMMUNICATIONS	12.21	7.8	7.7	11.9	3.7	7.3	6.3	7.4	7.8	7.8	8.1
34	XVCMFN16	I GOVERNMENT AND GOV. ENTERPRISES	8.61	7.7	7.6	9.1	9.5	9.1	8.9	8.9	8.5	8.4	8.1
35	XVCMFN17	I GENERAL GOVERNMENT	9.01	8.3	8.2	8.9	9.2	9.0	8.8	8.8	8.3	8.3	8.2
36	XVCMFN18	I FEDERAL ENTERPRISES	10.01	2.9	2.5	9.9	10.7	9.4	8.8	10.5	10.5	9.3	6.9
37	XVCMFN19	I STATE AND LOCAL ENTERPRISES	1.71	4.3	1.7	11.9	12.8	11.5	10.2	10.2	9.1	8.3	7.3

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TABLE 13.10 EMPLOYMENT (THOUSANDS)

LINE	VAR LABEL	I	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	MEET	I			ALL INDUSTRIES	94256	96380	97733	99672	101418	102942	104332	105889	107512	109096
2	MEHA	B			FARM	3310	3165	3066	3078	3111	3133	3126	3115	3098	3075
3	MEETING	B			MINING	862	888	863	848	842	841	845	855	867	876
4	MEETING	B													
5	MEETING	I			MANUFACTURING	20266	20692	20849	20973	21145	21238	21392	21538	21621	21600
6	MEETING	I			DURABLE GOODS	12074	12441	12573	12706	12888	13030	13184	13327	13407	13393
7	MEETING	B			LUMBER	667	672	670	680	694	706	726	738	752	766
8	MEETING	B			FURNITURE	534	545	553	555	567	570	580	584	591	596
9	MEETING	B			STONE, CLAY AND GLASS	692	721	733	732	735	736	746	758	768	772
10	MEETING	B			PRIMARY METALS	1251	1276	1277	1287	1310	1322	1316	1312	1297	1272
11	MEETING	B			FABRICATED METAL PRODUCTS	1531	1575	1601	1624	1654	1671	1695	1714	1723	1719
12	MEETING	B			NONMETALLIC MINERAL PRODUCTS	2290	2354	2404	2442	2491	2530	2606	2661	2696	2702
13	MEETING	B			ELECTRICAL MACHINERY	2044	2127	2143	2150	2166	2175	2176	2202	2207	2202
14	MEETING	B			MOTOR VEHICLES	965	988	998	1013	1021	1023	1025	1026	1020	1007
15	MEETING	B			NONAUTO TRANS EQ + ORG + MISC	1547	1607	1612	1632	1655	1664	1688	1703	1715	1717
16	MEETING	B			MISCELLANEOUS MANUFACTURING	437	444	451	461	473	480	496	496	499	498
17	MEETING	B			NONAUTO TRANS EQ + ORG	1110	1153	1161	1170	1182	1184	1194	1207	1216	1219
18	MEETING	B			NONAUTO TRANS EQ	948	993	991	1002	1017	1021	1035	1050	1062	1067
19	MEETING	B			INSTRUMENTS	162	169	168	168	165	161	160	157	153	153
20	MEETING	B			NONDURABLE GOODS	554	574	583	590	600	606	611	620	629	641
21	MEETING	B			FLUID AND BEVERAGES	8192	8251	8276	8267	8257	8238	8207	8212	8214	8207
22	MEETING	B			TOBACCO	1745	1719	1690	1677	1648	1615	1586	1546	1546	1541
23	MEETING	B			TEXTILES	70	70	70	70	69	68	67	66	66	65
24	MEETING	B			APPAREL	994	1000	996	997	1000	1003	1004	1009	1011	1010
25	MEETING	B			PAPER	1303	1313	1316	1314	1310	1289	1278	1265	1250	1233
26	MEETING	B			PRINTING AND PUBLISHING	713	726	733	739	745	750	751	754	754	750
27	MEETING	B			CHEMICALS	1125	1147	1160	1170	1179	1190	1202	1217	1235	1270
28	MEETING	B			PETROLEUM	1069	1076	1079	1065	1058	1051	1047	1048	1049	1049
29	MEETING	B			RUBBER	211	217	221	220	219	216	210	207	203	199
30	MEETING	B			LEATHER	688	701	715	727	743	757	783	797	810	818
31	MEETING	B				274	282	287	286	287	285	279	276	273	270
32	MEETING	B													
33	MEETING	I			REGULATED INDUSTRIES	4709	4782	4777	4844	4853	4884	4905	4961	5133	5177
34	MEETING	B			TRANSPORTATION	2691	2741	2745	2760	2790	2820	2841	2876	2930	3026
35	MEETING	B			UTILITIES	768	788	774	768	764	762	763	766	763	753
36	MEETING	B			COMMUNICATIONS	1250	1261	1257	1315	1298	1302	1300	1319	1351	1398
37	MEETING	B													
38	MEETING	I			COMMERCIAL AND OTHER	49497	50933	51858	53440	54788	55888	56975	58059	59178	60314
39	MEETING	I			CONTRACT CONSTRUCTION	44128	45528	46191	47639	48813	49819	50772	51722	52707	53709
40	MEETING	B			FINANCE, INSUR, REAL ESTATE	4245	4370	4364	4539	4661	4722	4760	4779	4812	4860
41	MEETING	B			SERVICES	4735	4906	5051	5243	5384	5471	5547	5619	5692	5766
42	MEETING	B			WHOLESALE AND RETAIL TRADE	16082	16648	16993	17672	18220	18730	19254	19774	20308	20856
43	MEETING	B			SELF-EMPLOYED WORKERS, NONAG	19066	19608	19783	20185	20548	20897	21211	21550	21895	22245
44	MEETING	B			UNPAID FAMILY WORKERS, NONAG	6279	6435	6697	6917	7027	7137	7247	7357	7467	7577
45	MEETING	B			CONCEPTUAL DIFF, HH VS ESTAB	478	470	470	470	470	470	470	470	470	470
46	MEETING	B				1389	1500	1500	1476	1452	1428	1404	1380	1356	1338
47	MEETING	B													
48	MEETING	B			GOVERNMENT	15612	15920	16320	16490	16718	16958	17230	17506	17779	18063
49	MEETING	B			FEDERAL	2757	2770	2770	2776	2783	2791	2800	2810	2822	2834
50	MEETING	B			STATE AND LOCAL	12854	13150	13550	13714	13936	14167	14431	14696	14957	15229
51	MEETING	B													

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TABLE 13.20 EMPLOYMENT, GROWTH RATES

LINE	VAR LABEL	I T E M	1970	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NEET	I ALL INDUSTRIES	4.11	2.3	1.4	2.0	1.8	1.5	1.4	1.5	1.5	1.5	1.3
2	NEEMA	B FARM	2.01	-4.4	-3.1	0.4	1.1	0.7	0.0	-0.2	-0.4	-0.5	-0.7
3	NEETMG	B MINING	3.81	3.0	-2.8	-1.8	-0.6	-0.2	-0.2	0.7	1.2	1.3	1.0
4	NEETMF	I MANUFACTURING	1.61	2.1	0.8	0.6	0.8	0.4	0.1	0.7	0.7	0.4	-0.1
5	NEETMFD	I DURABLE GOODS	5.21	3.0	1.1	1.1	1.4	0.8	0.3	1.1	1.1	0.6	-0.1
6	NEETMFD24	B LUMBER	1.91	0.7	-0.4	1.6	2.1	1.8	1.5	1.3	1.7	1.9	1.8
7	NEETMFD25	B FURNITURE	4.71	2.2	1.3	0.5	1.3	0.7	0.6	1.7	0.6	1.3	0.8
8	NEETMFD32	B STONE, CLAY AND GLASS	6.01	4.2	1.7	-0.1	0.3	0.2	0.0	1.3	1.7	1.3	0.5
9	NEETMFD33	B PRIMARY METALS	4.01	2.0	0.0	0.8	1.8	0.9	-0.7	0.1	-0.1	-1.1	-2.0
10	NEETMFD34	B FABRICATED METAL PRODUCTS	5.51	2.9	1.6	1.4	1.9	1.0	0.3	1.1	1.1	0.6	-0.2
11	NEETMFD35	B NONELECTRICAL MACHINERY	4.71	2.8	2.1	1.6	2.0	1.6	0.9	2.0	2.1	1.3	0.2
12	NEETMFD36	B ELECTRICAL MACHINERY	5.61	4.1	0.7	0.3	0.8	0.4	0.0	0.6	0.6	0.2	-0.3
13	NEETMFD37	B MOTOR VEHICLES	6.31	2.5	1.0	1.5	0.8	0.2	-0.3	0.4	0.1	-0.6	-1.3
14	NEETMFD37SP2	B NONAUTO TRANS EQ + ORD + MISC	4.51	3.9	0.3	1.2	1.4	0.6	0.1	1.1	1.1	0.7	0.1
15	NEETMFD39	B MISCELLANEOUS MANUFACTURING	4.51	1.7	1.6	2.2	2.5	1.5	0.5	1.6	1.3	0.6	-0.3
16	NEETMFD37SP1	B NONAUTO TRANS EQ + ORD	4.51	4.8	-0.2	0.8	1.0	0.2	-0.1	0.9	1.0	0.8	0.3
17	NEETMFD372.9	B NONAUTO TRANS EQ	4.51	4.8	-0.2	1.1	1.5	0.4	0.1	1.2	1.4	1.1	0.5
18	NEETMFD49	B ORDNANCE MANUFACTURING	4.51	4.6	0.1	-0.9	-1.9	-1.0	-1.4	-1.0	-1.6	-1.6	-1.1
19	NEETMFD43	B INSTRUMENTS	5.01	3.7	1.4	1.2	1.4	1.1	0.8	1.4	1.5	1.2	0.8
20	NEETMFD43	B NONDURABLE GOODS	1.51	0.7	0.3	-0.1	-0.1	-0.2	-0.3	-0.1	0.1	0.0	-0.1
21	NEETMFD20	B FOOD AND BEVERAGES	1.41	-1.5	-1.2	-1.2	-1.8	-2.0	-1.8	-1.3	-0.8	-0.5	-0.3
22	NEETMFD21	B TOBACCO	0.71	-0.4	-0.2	-0.6	-0.8	-1.0	-1.2	-1.0	-1.0	-1.1	-1.2
23	NEETMFD22	B TEXTILES	1.31	0.6	-0.4	0.0	0.4	0.3	0.1	0.3	0.2	0.1	-0.1
24	NEETMFD23	B APPAREL	1.21	0.8	0.2	-0.1	-0.3	-0.6	-0.4	-0.9	-0.9	-1.1	-1.4
25	NEETMFD26	B PAPER	2.11	1.8	1.0	0.8	0.8	0.6	0.2	0.3	0.1	-0.1	-0.4
26	NEETMFD27	B PRINTING AND PUBLISHING	1.41	2.0	1.2	0.9	0.7	0.9	1.0	1.3	1.4	1.5	1.4
27	NEETMFD28	B CHEMICALS	1.11	0.7	0.3	-1.3	-0.7	-0.5	-0.4	-0.3	0.1	0.1	-0.0
28	NEETMFD29	B PETROLEUM	0.91	2.9	1.7	-0.4	-0.7	-1.0	-1.3	-1.5	-1.6	-1.8	-2.1
29	NEETMFD30	B RUBBER	1.91	1.8	2.1	1.7	2.1	1.9	1.5	1.9	1.8	1.6	1.1
30	NEETMFD31	B LEATHER	3.51	3.0	1.9	0.1	-0.3	-0.7	-1.1	-1.0	-1.0	-1.0	-1.1
31	NEETMG	I REGULATED INDUSTRIES	2.61	1.5	-0.1	1.4	0.2	0.6	0.4	1.2	1.7	1.7	0.9
32	NEETMG1	B TRANSPORTATION	0.91	1.9	0.1	0.6	1.1	1.1	0.7	1.2	1.9	2.2	1.1
33	NEETMG49	B UTILITIES	3.21	1.5	-0.7	-0.8	-0.6	-0.2	0.1	0.4	-0.4	-0.5	-0.9
34	NEETMG48	B COMMUNICATIONS	7.11	0.9	-0.3	4.6	-1.3	0.3	-0.1	1.4	2.5	2.1	1.3
35	NEETMG	I COMMERCIAL AND OTHER	5.01	2.9	1.8	3.1	2.4	2.1	1.9	1.9	1.9	1.9	1.8
36	NEETMG1	B COMMERCIAL	5.11	3.2	1.5	3.1	2.5	2.1	1.9	1.9	1.9	1.9	1.8
37	NEETMG2	B CONTRACT CONSTRUCTION	10.41	2.9	-0.1	4.0	2.7	1.3	0.8	0.4	0.7	0.6	0.4
38	NEETMG3	B FINANCE, INSUR, REAL ESTATE	5.01	3.6	3.0	3.8	2.7	1.6	1.4	1.3	1.3	1.3	1.3
39	NEETMG4	B SERVICES	4.91	3.5	2.1	4.0	3.1	2.8	2.8	2.7	2.7	2.7	2.6
40	NEETMG5	B WHOLESALE AND RETAIL TRADE	4.21	2.8	0.9	2.0	1.8	1.7	1.5	1.6	1.6	1.6	1.5
41	NEETMG6	B SELF-EMPLOYED WORKERS, NONAG	4.61	2.5	4.1	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5
42	NEETMG7	B UNPAID FAMILY WORKERS, NONAG	-2.61	-1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	NEETMG8	B CONCEPTUAL DIFF, WH VS ESTAB	3.91	8.0	0.0	-1.6	-1.6	-1.7	-1.7	-1.7	-1.7	-1.8	-1.8
44	NEETMG9	I GOVERNMENT	2.61	2.0	2.5	1.0	1.4	1.4	1.4	1.6	1.6	1.6	1.5
45	NEETMG10	B FEDERAL	1.11	0.5	0.0	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4
46	NEETMG11	B STATE AND LOCAL	3.11	2.3	3.0	1.2	1.6	1.7	1.9	1.8	1.8	1.8	1.7

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 14.10 POPULATION AND LABOR FORCE (MILLIONS)

LINE VAR LABEL	I	J	F	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 NPT	I	TOTAL POPULATION			218.51	220.31	222.24	224.29	226.43	228.60	230.79	232.98	235.17	237.35	239.48
2															
3 NP100.04	E	TOTAL POPULATION, AGES 00 - 04			15.36	15.68	16.09	16.69	17.33	17.95	18.48	18.88	19.15	19.33	19.45
4 NP105.09	E	TOTAL POPULATION, AGES 05 - 09			16.09	16.49	16.10	15.57	15.02	15.54	15.86	16.26	16.66	17.51	18.12
5 NP110.14	E	TOTAL POPULATION, AGES 10 - 14			18.58	18.66	17.80	17.82	17.84	17.36	16.96	16.56	16.03	15.87	15.98
6 NP115.19	I	TOTAL POPULATION, AGES 15 - 19			21.06	20.91	20.60	20.01	19.40	18.78	18.26	18.00	18.02	17.84	17.57
7 NP120.24	E	TOTAL POPULATION, AGES 20 - 24			4.14	4.08	3.91	3.69	3.59	3.51	3.56	3.64	3.72	3.41	3.23
8 NP125.29	I	TOTAL POPULATION, AGES 25 - 29			8.42	8.28	8.15	7.92	7.54	7.23	7.05	7.02	7.15	7.31	7.09
9 NP130.34	I	TOTAL POPULATION, AGES 30 - 34			8.51	8.56	8.54	8.39	8.27	8.04	7.65	7.34	7.15	7.12	7.25
10 NP135.39	I	TOTAL POPULATION, AGES 35 - 39			20.45	20.72	20.90	21.10	21.07	20.96	20.81	20.49	19.91	19.33	18.70
11 NP140.44	I	TOTAL POPULATION, AGES 40 - 44			18.04	18.44	18.92	19.31	19.76	20.13	20.39	20.57	20.75	20.72	20.62
12 NP145.49	I	TOTAL POPULATION, AGES 45 - 49			15.89	16.56	17.24	18.14	18.08	18.40	18.60	19.28	19.67	20.12	20.49
13 NP150.54	I	TOTAL POPULATION, AGES 50 - 54			13.06	13.59	14.04	14.29	15.43	15.92	16.58	17.28	18.16	18.10	18.40
14 NP155.59	I	TOTAL POPULATION, AGES 55 - 59			11.32	11.51	11.69	11.98	12.41	13.13	13.66	14.10	14.56	15.49	15.98
15 NP160.64	I	TOTAL POPULATION, AGES 60 - 64			11.36	11.21	11.03	11.00	11.05	11.16	11.35	11.53	11.81	12.21	12.94
16 NP165.69	I	TOTAL POPULATION, AGES 65 - 69			11.82	11.72	11.67	11.54	11.40	11.25	11.10	10.93	10.90	10.95	11.06
17 NP170.74	I	TOTAL POPULATION, AGES 70 - 74			11.24	11.36	11.34	11.40	11.31	11.26	11.16	11.11	11.00	10.86	10.71
18 NP175.79	I	TOTAL POPULATION, AGES 75 & OVER			9.43	9.57	9.80	10.00	10.28	10.47	10.59	10.61	10.63	10.55	10.49
19 NP180.84	I	TOTAL POPULATION, AGES 80 & OVER			8.57	8.66	8.71	8.78	8.83	8.89	8.93	8.95	8.945	8.91	8.89
20 NP185.89	I	TOTAL POPULATION, AGES 85 & OVER			15.44	15.84	16.29	16.66	17.03	17.40	17.77	18.13	18.45	18.75	19.07
21 NP190.94	I	TOTAL POPULATION, AGES 90 & OVER			6.36	6.56	6.79	6.94	7.07	7.17	7.26	7.30	7.16	7.41	7.47
22 NP195.99	I	TOTAL POPULATION, AGES 95 & OVER			9.08	9.28	9.49	9.72	9.95	10.23	10.51	10.83	11.09	11.34	11.60
23															
24 NP200.04	I	TOTAL POPULATION, AGE 16 & OVER			163.55	166.00	168.35	170.52	172.45	174.25	175.94	177.64	179.40	181.21	182.70
25 NP205.09	I	TOTAL POPULATION, AGE 20 & OVER			146.63	149.17	151.66	154.20	156.84	159.58	162.33	165.09	167.88	170.68	173.36
26 NP210.14	I	TOTAL POPULATION, AGE 30 & OVER			84.13	85.51	86.85	88.35	89.95	91.59	93.24	94.84	96.53	98.29	100.08
27															
28 NCH	E	NUMBER OF HOUSEHOLDS			75.94	77.50	79.06	80.65	82.24	83.82	85.36	86.86	88.31	89.74	91.14
29 NCF	E	NUMBER OF FAMILIES			58.26	59.27	60.26	61.27	62.31	63.32	64.29	65.20	66.10	66.97	67.82
30 NCU	E	UNRELATED INDIVIDUALS			21.57	22.12	22.68	23.24	23.78	24.32	24.86	25.40	25.90	26.39	26.88
31															
32 NLM	E	ARMED FORCES			2.12	2.09	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07
33															
34 NPC16+	I	CIVILIAN POPULATION, AGE 16 & OVER			161.44	163.92	166.28	168.45	170.38	172.18	173.87	175.57	177.33	179.14	180.63
35 NPCM16+	I	MALE, AGE 16 & OVER			77.64	78.80	79.88	80.81	81.61	82.39	83.12	83.92	84.77	85.65	86.18
36 NPCF16+	I	FEMALE, AGE 16 & OVER			83.79	85.11	86.40	87.63	88.77	89.79	90.75	91.65	92.56	93.49	94.44
37															
38 NLC	I	CIVILIAN LABOR FORCE			100.32	102.74	104.84	106.46	107.98	109.50	110.89	112.27	113.69	115.17	116.55
39 NLCM16+	B	MALE			58.50	59.76	60.65	60.81	61.33	61.85	62.33	62.85	63.42	64.01	64.46
40 NLCF16+	B	FEMALE			41.83	42.98	44.19	45.65	46.65	47.64	48.56	49.42	50.27	51.16	52.09
41															
42 NRLTA	P	PARTICIPATION RATE (PERCENT)			63.05	63.59	63.98	64.13	64.32	64.54	64.73	64.91	65.08	65.26	65.50
43 NRLTM16+	P	MALE			77.79	78.25	78.27	77.47	77.25	77.11	76.96	76.87	76.80	76.74	76.65
44 NRLTF16+	P	FEMALE			49.84	50.55	51.16	52.16	52.71	53.26	53.76	54.18	54.57	54.97	55.51
45															
46 NEHT*	I	TOTAL EMPLOYMENT			94.26	96.38	97.73	99.67	101.42	102.94	104.33	105.89	107.51	109.10	110.48
47 NEUT	I	TOTAL UNEMPLOYMENT			6.07	6.36	7.11	6.79	6.57	6.55	6.56	6.38	6.18	6.08	6.06
48															
49 NEUI	I	UNEMPLOYMENT RATE (PERCENT)			6.05	6.19	6.78	6.38	6.08	5.99	5.91	5.89	5.43	5.28	5.20

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TABLE 14.20 POPULATION AND LABOR FORCE, GROWTH RATES

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 NPT	0.81	0.8	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.9
2 I TOTAL POPULATION	0.81	0.8	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.9
3 E TOTAL POPULATION, AGES 00 - 04	0.81	2.1	2.4	3.7	3.9	3.5	2.9	2.2	1.5	0.9	0.6
4 E TOTAL POPULATION, AGES 05 - 09	1.61	-2.3	-2.4	-3.3	-1.0	0.8	2.1	2.5	3.7	3.8	3.5
5 E TOTAL POPULATION, AGES 10 - 14	3.21	-2.8	-1.5	0.2	-1.0	-1.6	-2.3	-2.4	-3.2	-1.0	0.7
6 E TOTAL POPULATION, AGES 15 - 19	-0.51	-0.7	-1.5	-2.9	-3.0	-3.2	-2.8	-2.4	0.2	-0.3	-1.6
7 NPT15	1.61	-1.4	-4.2	-5.5	-2.7	-2.3	1.3	2.4	2.2	-0.3	-5.4
8 E TOTAL POPULATION, AGES 16 & 17	-0.21	-1.7	-1.5	-2.8	-4.8	-4.1	-2.5	-0.5	1.9	2.3	-7.1
9 NPT18	-0.31	0.6	-0.2	-1.7	-1.5	-2.8	-4.8	-4.1	-2.5	-0.5	-1.9
10 E TOTAL POPULATION, AGES 18 - 19	1.91	1.3	0.9	0.9	-0.1	-0.5	-0.7	-1.5	-2.5	-3.0	-3.2
11 E TOTAL POPULATION, AGES 20 - 24	1.71	2.2	2.6	2.1	2.3	1.8	1.3	0.9	0.9	-0.2	-0.5
12 E TOTAL POPULATION, AGES 25 - 29	3.11	4.2	4.1	5.2	-0.3	1.7	2.2	2.5	2.1	2.3	1.8
13 E TOTAL POPULATION, AGES 30 - 34	5.81	4.0	3.3	2.5	3.6	5.8	4.2	4.2	5.1	-0.3	1.7
14 E TOTAL POPULATION, AGES 35 - 39	1.11	1.6	1.6	1.6	3.6	5.8	4.2	3.3	1.8	7.9	3.2
15 E TOTAL POPULATION, AGES 40 - 44	-1.31	-1.4	-1.6	-0.3	0.4	1.1	1.6	1.6	2.5	3.6	5.8
16 E TOTAL POPULATION, AGES 45 - 49	-0.51	-0.8	-0.5	-1.1	-1.2	-1.3	-1.3	-1.5	-0.2	0.4	1.1
17 E TOTAL POPULATION, AGES 50 - 54	1.91	1.1	0.2	0.1	-0.8	-0.5	-0.8	-0.5	-1.1	-1.3	-1.3
18 E TOTAL POPULATION, AGES 55 - 59	0.71	1.5	2.4	2.1	2.7	1.9	1.1	0.2	0.1	-0.8	-0.5
19 E TOTAL POPULATION, AGES 60 - 64	1.41	1.1	0.5	0.8	0.6	0.7	1.5	2.5	2.2	2.8	1.9
20 E TOTAL POPULATION, AGES 65 - 69	2.61	2.6	2.8	2.3	2.2	2.2	2.1	2.0	1.8	1.6	1.7
21 E TOTAL POPULATION, AGES 70 - 74	3.61	3.2	3.5	2.2	1.9	1.4	1.2	0.6	0.8	0.6	0.8
22 E TOTAL POPULATION, AGES 75 & OVER	2.01	2.1	2.4	2.4	2.4	2.8	2.7	3.0	2.4	2.3	2.3
23 I TOTAL POPULATION, AGE 16 & OVER	1.61	1.5	1.4	1.3	1.1	1.0	1.0	1.0	1.0	1.0	0.8
24 E TOTAL POPULATION, AGE 20 & OVER	1.81	1.7	1.7	1.7	1.6	1.5	1.4	1.3	1.1	1.0	0.9
25 E TOTAL POPULATION, AGES 30 - 64	1.71	1.6	1.6	1.7	1.8	1.6	1.8	1.7	1.6	1.8	1.8
26 NPT30-64	1.71	1.6	1.6	1.7	1.8	1.6	1.8	1.7	1.6	1.8	1.8
27 E NUMBER OF HOUSEHOLDS	2.11	2.1	2.0	2.0	2.0	1.9	1.8	1.8	1.7	1.6	1.6
28 E NUMBER OF FAMILIES	1.71	1.7	1.7	1.7	1.7	1.6	1.5	1.4	1.4	1.3	1.3
29 E UNRELATED INDIVIDUALS	2.61	2.6	2.5	2.5	2.3	2.3	2.2	2.2	2.0	1.9	1.8
30 NCM	-0.81	-1.4	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31 E ARMED FORCES	-0.81	-1.4	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32 NCM	-0.81	-1.4	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33 E CIVILIAN POPULATION, AGE 16 & OVER	1.61	1.5	1.4	1.3	1.1	1.1	1.0	1.0	1.0	1.0	0.8
34 E MALE, AGE 16 & OVER	3.21	1.5	1.4	1.2	1.0	1.0	0.9	1.0	1.0	1.0	0.6
35 E FEMALE, AGE 16 & OVER	0.11	1.6	1.5	1.4	1.3	1.2	1.1	1.0	1.0	1.0	1.0
36 E CIVILIAN LABOR FORCE	3.01	2.4	2.0	1.5	1.4	1.4	1.3	1.2	1.3	1.3	1.2
37 E MALE	1.81	2.2	1.5	0.3	0.9	0.9	0.8	0.8	0.9	0.9	0.7
38 E FEMALE	4.71	2.7	2.8	3.3	2.2	2.1	1.9	1.8	1.7	1.8	1.8
39 E TOTAL EMPLOYMENT	4.11	2.3	1.4	2.0	1.8	1.5	1.4	1.5	1.5	1.5	1.3
40 E TOTAL UNEMPLOYMENT	-1.51	4.8	11.8	-4.5	-3.2	-0.2	0.0	-2.6	-3.2	-1.6	-0.2

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
PUSH-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 14.30 LABOR FORCE PARTICIPATION RATES (FRACTIONS)

LINE	VAR LABEL	I	T	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NRLTM16+	1														
2	NRLTM16.19	1														
3	NRLTM20.24	1														
4	NRLTM25.34	1														
5	NRLTM35.44	1														
6	NRLTM45.54	1														
7	NRLTM55.64	1														
8	NRLTM65+	1														
9																
10	NRLTF16+	1														
11	NRLTF16.19	1														
12	NRLTF20.24	1														
13	NRLTF25.34	1														
14	NRLTF35.44	1														
15	NRLTF45.54	1														
16	NRLTF55.64	1														
17	NRLTF65+	1														
18																
19	NRLT	1														
20	NRLT16.19	1														
21	NRLT20.24	1														
22	NRLT25.34	1														
23	NRLT35.44	1														
24	NRLT45.54	1														
25	NRLT55.64	1														
26	NRLT65+	1														
27																
28																
29																
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TABLE 14.40 LABOR FORCE

LINE	VAR	LABEL	I T E M												1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
			LABOR FORCE (MILLIONS)																					
1			I																					
2			LABOR FORCE (MILLIONS)																					
3	NLC	16+	H												58,497	59,762	60,653	60,814	61,331	61,854	62,329	62,853	63,419	64,013
4	NLC	16+	H												5,054	5,024	4,978	4,865	4,719	4,569	4,390	4,300	4,114	4,386
5	NLC	20-24	H												8,025	8,130	8,209	8,174	8,132	8,066	7,989	7,833	7,563	7,012
6	NLC	25-34	H												15,281	15,058	14,433	16,964	17,136	17,456	17,777	18,082	18,351	18,548
7	NLC	35-44	H												10,991	11,386	11,693	11,812	12,512	13,096	13,649	14,166	14,686	15,182
8	NLC	45-54	H												10,137	10,115	10,030	9,845	9,701	9,754	9,758	9,743	9,818	10,031
9	NLC	55-64	H												7,098	7,324	7,372	7,239	7,140	7,041	6,908	6,872	6,818	6,730
10	NLC	65+	H												1,910	1,925	1,938	1,916	1,892	1,872	1,850	1,853	1,847	1,843
11			H																					
12	NLC	25-54	I												36,410	37,359	38,156	38,620	39,489	40,305	41,184	41,995	42,876	43,761
13			I																					
14	NLC	16+	H												41,827	42,977	44,192	45,646	46,658	47,642	48,561	49,420	50,271	51,160
15	NLC	16+	H												4,442	4,403	4,394	4,375	4,320	4,089	3,858	3,630	3,424	3,887
16	NLC	20-24	H												6,866	7,067	7,211	7,423	7,443	7,469	7,479	7,398	7,221	7,052
17	NLC	25-34	H												10,546	11,018	11,654	12,331	12,517	12,856	13,202	13,467	13,708	13,917
18	NLC	35-44	H												7,637	7,977	8,291	8,746	9,437	10,153	10,772	11,315	11,846	12,351
19	NLC	45-54	H												6,733	6,687	6,667	6,693	6,704	6,792	6,942	7,082	7,143	7,646
20	NLC	55-64	H												4,478	4,680	4,789	4,873	4,984	5,023	5,016	5,010	4,986	4,934
21	NLC	65+	H												1,125	1,146	1,184	1,206	1,229	1,260	1,292	1,319	1,343	1,372
22			H																					
23	NLC		I												100,324	102,719	104,844	106,460	107,985	109,496	110,890	112,273	113,690	115,173
24	NLC	16-19	I												9,496	9,427	9,372	9,240	9,039	8,658	8,248	8,130	8,130	8,273
25	NLC	20-24	I												14,891	15,197	15,420	15,596	15,574	15,535	15,468	15,231	14,784	14,340
26	NLC	25-34	I												25,827	26,876	28,087	29,295	29,652	30,312	30,979	31,550	32,060	32,465
27	NLC	35-44	I												18,628	19,363	19,965	20,558	22,029	23,249	24,421	25,483	26,533	27,535
28	NLC	45-54	I												16,870	16,802	16,697	16,537	16,485	16,546	16,700	16,825	17,181	17,677
29	NLC	55-64	I												11,576	12,004	12,161	12,112	12,084	12,064	11,924	11,881	11,804	11,664

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TABLE 14.40 LABOR FORCE

LINE VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	LABOR FORCE (% CHANGE)											
2	MALE, TOTAL	1.01	2.2	1.5	0.3	0.9	0.9	0.9	0.8	0.9	0.9	0.7
3	AGES 16 TO 19	1.31	-0.6	-0.9	-2.3	-3.0	-3.2	-3.9	-2.0	0.1	1.7	-1.3
4	AGES 20 TO 24	1.91	1.3	1.0	-0.4	-0.5	-0.8	-1.0	-2.0	-3.5	-3.6	-1.0
5	AGES 25 TO 34	2.61	3.6	3.6	3.2	1.0	1.9	1.8	1.7	1.5	1.1	0.7
6	AGES 35 TO 44	3.51	3.6	2.7	1.0	6.1	4.5	4.2	3.8	3.7	3.4	2.5
7	AGES 45 TO 54	-0.51	-0.2	-0.8	-1.8	-0.6	-0.3	0.0	-0.1	1.0	2.0	3.6
8	AGES 55 TO 64	0.81	3.2	0.6	-1.8	-1.4	-1.4	-1.9	-0.5	-0.8	-1.1	-1.1
9	AGES 65 AND OVER	3.51	0.8	0.7	-1.2	-1.3	-1.1	-0.7	-0.3	-0.3	0.1	-0.2
10	MALE, AGES 25 TO 54	2.01	2.6	2.1	1.2	2.1	2.2	2.2	2.0	2.1	2.1	2.0
11	FEMALE, TOTAL	4.71	2.7	2.8	3.3	2.2	2.1	1.9	1.6	1.7	1.6	1.8
12	AGES 16 TO 19	4.11	-0.9	-0.2	-0.4	-1.3	-5.4	-5.7	-0.7	-0.2	-2.3	0.3
13	AGES 20 TO 24	4.71	2.9	2.0	2.9	0.3	0.4	0.1	-1.1	-2.4	1.6	-2.1
14	AGES 25 TO 34	7.11	4.9	5.8	5.8	1.5	2.7	2.7	2.0	1.8	1.9	1.5
15	AGES 35 TO 44	6.81	4.4	3.9	5.5	8.6	6.9	6.1	5.0	4.7	4.3	3.6
16	AGES 45 TO 54	0.51	-0.7	-0.3	0.4	0.2	1.3	2.2	2.0	3.7	4.1	5.5
17	AGES 55 TO 64	2.51	4.5	2.3	1.7	1.5	1.6	-0.1	-0.1	-0.5	-1.0	-0.8
18	AGES 65 AND OVER	5.61	1.9	3.4	1.0	1.9	2.5	2.6	2.1	1.8	2.1	2.6
19	BOTH SEXES, TOTAL	3.01	2.4	2.0	1.5	1.4	1.4	1.3	1.2	1.3	1.3	1.2
20	AGES 16 TO 19	2.61	-0.7	-0.6	-1.4	-2.2	-4.2	-4.7	-1.4	0.1	1.7	-0.6
21	AGES 20 TO 24	3.21	2.1	1.5	1.1	-0.1	-0.2	-0.4	-1.5	-2.9	-3.0	-3.0
22	AGES 25 TO 34	4.81	4.1	4.5	4.3	1.2	2.2	2.2	1.8	1.6	1.3	1.0
23	AGES 35 TO 44	4.81	3.9	3.2	2.9	7.2	5.5	5.0	4.4	4.1	3.8	3.0
24	AGES 45 TO 54	-0.11	-0.4	-0.6	-1.0	-0.3	0.4	0.9	0.8	2.1	2.9	4.4
25	AGES 55 TO 64	1.51	3.7	1.3	-0.4	-0.2	-0.2	-1.2	-0.4	-0.6	-1.2	-1.0

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TABLE 14.50 UNEMPLOYMENT RATES (PERCENT)

LINE VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 NUTM167	MALE, TOTAL	5.201	5.35	6.01	5.69	5.49	5.43	5.19	5.18	4.93	4.77	4.71
2 NUTM16.19	AGES 16 TO 19	15.501	15.89	16.95	16.12	15.59	15.73	15.94	15.75	15.56	15.60	15.80
3 NUTM20.24	AGES 20 TO 24	9.091	9.31	10.66	10.28	9.96	9.94	9.95	9.63	9.21	8.95	8.89
4 NUTM25.34	AGES 25 TO 34	4.211	4.40	5.18	4.85	4.71	4.66	4.64	4.45	4.22	4.05	4.00
5 NUTM35.44	AGES 35 TO 44	2.681	2.89	3.50	3.31	3.24	3.22	3.22	3.09	2.91	2.79	2.76
6 NUTM45.54	AGES 45 TO 54	2.791	2.89	3.23	3.09	3.05	3.04	3.05	2.92	2.75	2.62	2.60
7 NUTM55.64	AGES 55 TO 64	2.791	2.98	3.24	3.12	3.10	3.14	3.20	3.14	3.05	3.00	3.06
8 NUTM65+	AGES 65 AND OVER	4.591	4.68	5.08	4.72	4.57	4.57	4.59	4.40	4.35	4.29	4.31
9 NUTM25.54	MALE, AGES 25 TO 54	3.421	3.58	4.15	3.93	3.83	3.80	3.79	3.64	3.43	3.28	3.24
10 NUTM167	FEMALE, TOTAL	7.231	7.35	7.84	7.29	6.87	6.71	6.58	6.33	6.07	5.91	5.81
11 NUTM16.19	AGES 16 TO 19	17.101	17.02	17.57	16.48	15.64	15.64	15.71	15.46	15.28	15.33	15.42
12 NUTM20.24	AGES 20 TO 24	10.291	10.41	11.13	10.37	9.71	9.50	9.34	8.94	8.54	8.26	8.07
13 NUTM25.34	AGES 25 TO 34	6.761	6.92	7.47	6.95	6.59	6.49	6.42	6.19	5.94	5.77	5.68
14 NUTM35.44	AGES 35 TO 44	5.011	5.17	5.59	5.21	4.99	4.94	4.92	4.76	4.50	4.47	4.44
15 NUTM45.54	AGES 45 TO 54	4.121	4.33	4.74	4.43	4.25	4.21	4.19	4.05	3.89	3.79	3.75
16 NUTM55.64	AGES 55 TO 64	3.171	3.50	3.89	3.65	3.52	3.49	3.47	3.35	3.20	3.10	3.06
17 NUTM65+	AGES 65 AND OVER	3.941	4.15	4.47	4.16	3.91	3.84	3.79	3.64	3.40	3.38	3.32
18 NUTM167	BOTH SEXES, TOTAL	6.051	6.19	6.70	6.38	6.08	5.99	5.91	5.69	5.43	5.28	5.20
19 NUTM16.19	AGES 16 TO 19	16.251	16.42	17.24	16.29	15.62	15.69	15.83	15.61	15.43	15.47	15.62
20 NUTM20.24	AGES 20 TO 24	9.641	9.82	10.88	10.32	9.84	9.73	9.65	9.29	8.88	8.61	8.48
21 NUTM25.34	AGES 25 TO 34	5.251	5.43	6.13	5.74	5.50	5.44	5.40	5.19	4.95	4.79	4.72
22 NUTM35.44	AGES 35 TO 44	3.751	3.92	4.37	4.12	3.99	3.97	3.97	3.83	3.66	3.54	3.51
23 NUTM45.54	AGES 45 TO 54	3.321	3.46	3.83	3.63	3.53	3.52	3.52	3.40	3.24	3.13	3.10
24 NUTM55.64	AGES 55 TO 64	2.941	3.18	3.56	3.34	3.27	3.28	3.31	3.23	3.11	3.04	3.06
25 NUTM65+	AGES 65 AND OVER	4.351	4.49	4.85	4.50	4.31	4.27	4.26	4.13	3.99	3.91	3.88
26 NUTM167	SCHOOL ENROLLMENT RATES	0.697310	0.6937	0.6944	0.7020	0.7002	0.6989	0.7019	0.7012	0.7011	0.7032	0.7156
27 NUTM16.19	MALE, AGES 16 TO 19	0.895010	0.8877	0.8902	0.8902	0.8889	0.8874	0.8860	0.8855	0.8866	0.8882	0.8892
28 NUTM20.24	MALE, AGES 20 TO 19	0.884410	0.8830	0.8882	0.8866	0.8800	0.8814	0.8851	0.8817	0.8817	0.8812	0.8815
29 NUTM25.34	MALE, AGES 25 TO 24	0.259910	0.2584	0.2600	0.2603	0.2614	0.2626	0.2631	0.2641	0.2666	0.2694	0.2722
30 NUTM35.44	FEMALE, AGES 16 TO 19	0.661410	0.6737	0.6817	0.6798	0.6715	0.6841	0.6984	0.6974	0.7023	0.7051	0.7094
31 NUTM45.54	FEMALE, AGES 20 TO 24	0.204710	0.2140	0.2217	0.2255	0.2272	0.2299	0.2336	0.2374	0.2409	0.2448	0.2491
32 NUTM55.64	SCHOOL ENROLLMENTS (MILLIONS)	5.6311	5.618	5.576	5.392	5.186	4.999	4.837	4.785	4.632	4.536	4.488
33 NUTM65+	MALE, AGES 16 TO 19	3.7301	3.681	3.631	3.521	3.343	3.201	3.116	3.104	3.168	3.254	3.153
34 NUTM16.19	MALE, AGES 16 TO 19	1.0001	1.937	1.945	1.870	1.843	1.799	1.721	1.681	1.664	1.682	1.736
35 NUTM20.24	MALE, AGES 20 TO 24	2.4131	2.472	2.496	2.930	2.541	2.532	2.517	2.498	2.445	2.390	2.331
36 NUTM35.44	FEMALE, AGES 16 TO 19	5.5551	5.598	5.590	5.339	5.228	5.228	5.000	4.923	4.918	4.987	4.984
37 NUTM45.54	FEMALE, AGES 20 TO 24	2.1271	2.248	2.320	2.357	2.377	2.402	2.423	2.422	2.389	2.357	2.323
38 NUTM55.64	FERTILITY RATES (BIRTHS/THOUSAND)	1837.1	1854.1	1871.1	1917.1	1944.1	1962.1	1978.1	1994.1	2008.1	2021.1	2035.1
39 NUTM16.19	AGES 15 TO 19	55.1	55.1	56.1	56.1	56.1	55.1	54.1	53.1	52.1	51.1	51.1
40 NUTM20.24	AGES 20 TO 24	118.1	121.1	124.1	128.1	131.1	134.1	136.1	137.1	138.1	139.1	140.1

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
POST-REFITTING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 14.60 NUMBER OF UNEMPLOYED

LINE VAR LABEL	ITEM	1976	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NUMBER OF UNEMPLOYED (MILLIONS)											
2												
3												
4	MALE, TOTAL	3.042	3.199	3.647	3.459	3.364	3.159	3.161	3.257	3.129	3.055	3.035
5	AGES 16 TO 19	0.783	0.798	0.844	0.784	0.736	0.719	0.700	0.677	0.671	0.684	0.684
6	AGES 20 TO 24	0.729	0.757	0.875	0.840	0.810	0.802	0.795	0.754	0.697	0.652	0.623
7	AGES 25 TO 34	0.648	0.697	0.851	0.840	0.806	0.814	0.824	0.804	0.774	0.751	0.747
8	AGES 35 TO 44	0.317	0.346	0.409	0.391	0.406	0.422	0.419	0.438	0.428	0.423	0.429
9	AGES 45 TO 54	0.283	0.292	0.324	0.304	0.298	0.297	0.297	0.285	0.271	0.261	0.270
10	AGES 55 TO 64	0.198	0.218	0.246	0.246	0.221	0.221	0.221	0.216	0.208	0.202	0.201
11	AGES 65 AND OVER	0.088	0.090	0.098	0.090	0.086	0.085	0.085	0.083	0.080	0.079	0.080
12												
13	MALE, AGES 25 TO 54	1.244	1.316	1.584	1.518	1.510	1.533	1.561	1.527	1.472	1.437	1.445
14												
15	FEMALE, TOTAL	3.025	3.160	3.464	3.329	3.203	3.195	3.194	3.128	3.049	3.023	3.028
16	AGES 16 TO 19	0.760	0.749	0.772	0.721	0.676	0.639	0.606	0.592	0.584	0.596	0.601
17	AGES 20 TO 24	0.706	0.735	0.803	0.769	0.723	0.710	0.698	0.662	0.617	0.581	0.557
18	AGES 25 TO 34	0.713	0.763	0.870	0.858	0.825	0.835	0.848	0.833	0.814	0.803	0.803
19	AGES 35 TO 44	0.382	0.412	0.464	0.456	0.473	0.502	0.530	0.518	0.543	0.553	0.568
20	AGES 45 TO 54	0.278	0.289	0.316	0.296	0.285	0.286	0.291	0.287	0.286	0.289	0.301
21	AGES 55 TO 64	0.142	0.164	0.184	0.178	0.174	0.175	0.174	0.168	0.159	0.153	0.150
22	AGES 65 AND OVER	0.044	0.048	0.053	0.050	0.048	0.048	0.049	0.048	0.047	0.046	0.047
23												
24	BOTH SEXES, TOTAL	6.068	6.360	7.111	6.788	6.567	6.354	6.358	6.384	6.178	6.077	6.063
25	AGES 16 TO 19	1.543	1.548	1.616	1.505	1.412	1.358	1.306	1.269	1.255	1.280	1.285
26	AGES 20 TO 24	1.436	1.493	1.677	1.609	1.533	1.511	1.493	1.416	1.313	1.235	1.180
27	AGES 25 TO 34	1.357	1.460	1.721	1.681	1.631	1.648	1.671	1.638	1.587	1.554	1.550
28	AGES 35 TO 44	0.561	0.582	0.640	0.600	0.583	0.583	0.588	0.572	0.556	0.552	0.571
29	AGES 45 TO 54	0.340	0.382	0.432	0.404	0.395	0.396	0.395	0.383	0.367	0.355	0.353
30	AGES 55 AND OVER	0.132	0.138	0.151	0.141	0.134	0.134	0.134	0.131	0.127	0.126	0.126

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 14.60 NUMBER OF UNEMPLOYED

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	-----										
2	-----										
3	-----										
	NUMBER OF UNEMPLOYED										
	(% CHANG)										
4	MALE, TOTAL										
5	NUTM16, 19	5.2	14.0	-5.2	-2.7	-0.1	0.1	-3.1	-3.9	-2.4	-0.6
6	NUTM16, 19	1.9	5.7	-7.0	-6.2	-2.3	-2.6	-3.2	-0.9	1.9	-0.1
7	NUTM20, 24	3.8	15.5	-4.0	-3.5	-1.1	-0.9	-5.1	-7.6	-6.4	-4.4
8	NUTM25, 34	8.3	22.1	-3.3	3.9	0.9	1.3	-2.4	-3.8	-2.9	-0.5
9	NUTM35, 44	9.3	18.2	-4.4	3.9	3.9	4.1	-0.4	-2.2	-1.2	1.3
10	NUTM45, 54	3.3	10.7	-6.2	-1.9	-0.5	0.2	-4.1	-5.0	-2.9	2.6
11	NUTM55, 64	10.0	12.8	-8.0	-2.1	-0.2	-0.2	-2.4	-3.9	-2.8	0.6
12	NUTM65+	2.9	9.1	-8.1	-4.5	-1.1	-0.2	-2.7	-3.1	-1.4	0.3
13	MALE, AGES 25 TO 54										
14	NUTM25, 54	7.4	18.6	-4.2	-0.5	1.5	1.8	-2.2	-3.6	-2.4	0.6
15	FEMALE, TOTAL										
16	NUTF16, 19	4.5	9.6	-3.9	-3.8	-0.3	0.0	-2.2	-2.5	-0.9	0.2
17	NUTF16, 19	-1.3	3.0	-6.6	-6.3	-5.4	-5.2	-2.3	-1.3	2.0	0.9
18	NUTF20, 24	4.1	9.1	-4.1	-4.1	-1.8	-1.6	-5.3	-6.8	-5.5	-4.5
19	NUTF25, 34	6.9	14.1	-1.4	-3.9	1.2	1.6	-1.8	-2.3	-1.3	-0.1
20	NUTF35, 44	7.0	12.6	-1.7	3.8	6.0	5.6	1.6	0.8	1.8	2.8
21	NUTF45, 54	4.2	9.2	-6.2	-4.0	0.5	1.4	-1.4	-0.4	1.4	4.6
22	NUTF55, 64	15.3	13.9	-4.6	-2.3	0.8	-0.5	-3.7	-4.9	-6.2	-1.9
23	NUTF65+	7.4	11.2	-5.2	-4.2	0.7	1.1	-1.9	-2.5	-0.8	0.6
24	BOTH SEXES, TOTAL										
25	NUT16, 19	4.8	11.8	-4.5	-3.2	-0.2	0.0	-2.6	-3.2	-1.6	-0.2
26	NUT16, 19	0.3	4.4	-6.8	-6.2	-3.8	-3.9	-2.8	-1.1	1.9	0.4
27	NUT20, 24	4.0	12.0	-4.1	-4.8	-1.4	-1.2	-5.2	-7.2	-6.0	-4.5
28	NUT25, 34	7.6	17.9	-2.3	-3.0	1.1	1.5	-2.1	-3.1	-2.1	-0.3
29	NUT35, 44	8.5	15.1	-2.9	3.8	5.0	4.9	0.7	-0.5	0.5	2.2
30	NUT45, 54	3.7	10.0	-6.2	-2.9	-0.0	1.0	-2.8	-2.7	-0.7	3.6
31	NUT55, 64	12.2	13.2	-6.6	-2.2	0.3	-0.3	-3.0	-4.1	-3.4	-0.5
32	NUT65+	9.4	9.8	-7.1	-4.4	-0.5	0.2	-2.4	-2.9	-1.2	0.4

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TABLE 14.70 CIVILIAN NONINSTITUTIONAL POPULATION

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	CIV NONINST POPULATION (MILLIONS)											
2	MALE, TOTAL	75,197,176,376	77,491	78,496	79,390	80,217	80,990	81,766	82,576	83,418	84,095	
3	AGES 16 TO 19	8,150	8,111	8,047	7,856	7,602	7,331	7,045	6,763	6,488	6,211	6,075
4	AGES 16 TO 17	4,207	4,136	4,077	3,959	3,765	3,611	3,520	3,503	3,568	3,650	3,547
5	AGES 18 TO 19	3,931	3,975	3,970	3,897	3,837	3,720	3,525	3,270	3,279	3,262	3,328
6	AGES 20 TO 24	9,361	9,508	9,600	9,699	9,682	9,630	9,558	9,400	9,109	8,808	8,505
7	AGES 25 TO 34	16,095,16,631	17,212	17,862	18,037	18,371	18,697	19,020	19,307	19,507	19,632	
8	AGES 25 TO 29	8,531	8,737	8,979	9,171	9,391	9,569	9,696	9,780	9,873	9,955	9,903
9	AGES 30 TO 34	7,562	7,894	8,233	8,671	9,046	9,402	9,601	9,741	9,833	9,652	9,629
10	AGES 35 TO 44	11,503,11,850	12,154	12,428	12,646	12,820	13,000	13,180	13,360	13,540	13,720	13,900
11	AGES 35 TO 39	6,120	6,388	6,607	6,717	6,798	6,843	6,867	6,873	6,873	6,873	6,873
12	AGES 40 TO 44	5,375	5,462	5,547	5,601	5,602	5,654	5,714	5,771	5,828	5,885	5,942
13	AGES 45 TO 54	11,081,10,971	10,873	10,805	10,745	10,745	10,745	10,745	10,745	10,745	10,745	10,745
14	AGES 45 TO 49	5,456	5,384	5,301	5,240	5,296	5,350	5,434	5,517	5,599	5,682	5,765
15	AGES 50 TO 54	5,624	5,588	5,572	5,526	5,465	5,395	5,324	5,244	5,159	5,075	4,995
16	AGES 55 TO 64	9,656	9,780	9,903	10,008	10,103	10,178	10,204	10,204	10,169	10,075	9,994
17	AGES 55 TO 59	5,301	5,369	5,385	5,392	5,353	5,338	5,303	5,289	5,246	5,187	5,119
18	AGES 60 TO 64	4,351	4,411	4,514	4,616	4,750	4,841	4,901	4,915	4,924	4,888	4,875
19	AGES 65 AND OVER	9,347	9,525	9,703	9,857	10,005	10,163	10,345	10,570	10,765	10,981	11,166
20	AGES 65 TO 69	3,701	3,750	3,773	3,805	3,828	3,858	3,915	4,015	4,105	4,225	4,304
21	AGES 70 AND OVER	5,645	5,774	5,930	6,053	6,177	6,305	6,430	6,554	6,660	6,756	6,862
22	FEMALE, TOTAL	83,923,85,181	86,384	87,504	88,507	89,445	90,324	91,210	92,126	93,062	93,801	
23	AGES 16 TO 19	8,284	8,233	8,159	7,979	7,732	7,468	7,192	6,900	6,619	6,345	6,099
24	AGES 16 TO 17	4,171	4,035	3,972	3,864	3,681	3,528	3,438	3,419	3,484	3,559	3,427
25	AGES 18 TO 19	4,113	4,198	4,186	4,115	4,051	3,941	3,753	3,598	3,506	3,486	3,552
26	AGES 20 TO 24	10,080,10,218	10,310	10,408	10,408	10,394	10,341	10,257	10,105	9,816	9,520	9,217
27	AGES 25 TO 34	16,994,17,519	18,096	18,745	18,947	19,286	19,618	19,945	20,240	20,452	20,584	
28	AGES 25 TO 29	9,015	9,209	9,444	9,643	9,870	10,055	10,190	10,281	10,375	10,359	10,307
29	AGES 30 TO 34	7,979	8,310	8,652	9,102	9,076	9,232	9,428	9,664	9,865	10,094	10,277
30	AGES 35 TO 44	12,416,12,779	13,103	13,374	14,151	14,761	15,359	15,934	16,503	17,037	17,476	
31	AGES 35 TO 39	6,684	6,909	7,134	7,260	7,329	7,422	7,469	7,531	7,583	7,629	7,676
32	AGES 40 TO 44	5,772	5,870	5,968	6,115	6,329	6,691	6,957	7,181	7,305	7,369	7,415
33	AGES 45 TO 54	11,873,11,730	11,598	11,514	11,462	11,448	11,448	11,466	11,472	11,609	11,848	12,266
34	AGES 45 TO 49	5,787	5,705	5,614	5,606	5,635	5,697	5,795	5,890	6,035	6,245	6,501
35	AGES 50 TO 54	6,061	6,025	5,984	5,908	5,827	5,751	5,671	5,582	5,575	5,602	5,664
36	AGES 55 TO 64	10,795,10,933	11,063	11,170	11,258	11,321	11,321	11,320	11,293	11,225	11,101	10,990
37	AGES 55 TO 59	5,827	5,887	5,898	5,901	5,852	5,813	5,755	5,717	5,644	5,560	5,492
38	AGES 60 TO 64	4,968	5,047	5,164	5,269	5,406	5,508	5,566	5,576	5,581	5,535	5,499
39	AGES 65 AND OVER	13,480,13,768	14,054	14,314	14,563	14,819	15,111	15,444	15,742	16,060	16,349	
40	AGES 65 TO 69	4,686	4,732	4,753	4,787	4,816	4,848	4,926	5,044	5,151	5,286	5,383
41	AGES 70 AND OVER	8,794	9,036	9,301	9,527	9,747	9,971	10,185	10,400	10,592	10,774	10,966
42												
43	BOTH SEXES, TOTAL	159,120,61,556,163,875,166,001,167,897,169,662,171,313,172,976,174,702,176,480,177,936										
44	AGES 16 TO 19	16,434,16,343	16,206	15,835	15,334	14,799	14,237	13,690	13,138	12,586	12,034	11,482
45	AGES 20 TO 24	19,405,19,726	19,911	20,107	20,076	19,971	19,815	19,505	19,244	18,924	18,604	18,284
46	AGES 25 TO 34	33,049,34,150	35,308	36,588	36,984	37,657	38,315	38,965	39,547	39,959	40,216	
47	AGES 35 TO 44	23,920,24,629	25,256	25,802	27,352	28,560	29,740	30,972	31,998	32,958	33,852	
48	AGES 45 TO 54	22,954,22,702	22,471	22,319	22,223	22,193	22,225	22,233	22,492	22,953	23,773	
49	AGES 55 TO 64	20,451,20,713	20,966	21,178	21,361	21,500	21,524	21,497	21,394	21,176	20,985	
50	AGES 65 AND OVER	22,826,23,293	23,757	24,172	24,568	24,982	25,456	26,014	26,508	27,041	27,515	

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TABLE 14.70 CIVILIAN NONINSTITUTIONAL POPULATION

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
CIV NONINST POPULATION (% CHANGE)												
1	MALE, TOTAL	1.71	1.6	1.5	1.3	1.1	1.0	1.0	1.0	1.0	1.0	0.8
2	AGES 16 TO 19	-0.21	-0.5	-0.8	-2.4	-3.2	-3.6	-3.9	-2.4	-0.4	1.0	-0.7
3	AGES 16 TO 17	-0.21	-0.7	-1.4	-2.9	-4.9	-4.1	-2.5	-0.5	1.9	1.1	-3.1
4	AGES 18 TO 19	-0.21	0.8	-0.1	-1.8	-1.5	-0.1	-5.2	-0.4	-2.7	-0.5	2.0
5	AGES 20 TO 24	1.81	1.5	1.0	1.0	-0.2	-0.5	-0.7	-1.7	-3.1	-1.3	-3.4
6	AGES 25 TO 34	3.11	3.3	3.5	3.7	1.1	1.9	1.8	1.7	1.5	1.0	0.6
7	AGES 35 TO 39	3.11	2.4	2.8	2.1	1.9	1.8	1.3	0.9	1.0	-0.2	-0.5
8	AGES 40 TO 44	3.31	4.4	4.3	5.3	-0.3	4.5	2.3	2.7	2.1	3.4	1.8
9	AGES 45 TO 49	3.71	3.0	2.6	2.3	6.2	4.5	4.2	3.9	3.7	3.4	2.5
10	AGES 50 TO 54	6.21	4.2	3.4	2.0	3.3	3.3	4.3	4.3	5.2	-0.4	1.7
11	AGES 55 TO 59	1.01	1.6	1.6	2.4	3.7	6.0	4.1	3.3	1.9	0.1	3.3
12	AGES 60 TO 64	-0.91	-1.0	-0.9	-0.6	-0.4	-0.1	0.1	0.0	1.1	2.0	3.6
13	AGES 65 TO 69	-0.31	-1.3	-1.5	-0.4	0.3	1.0	1.6	1.5	2.6	3.7	5.9
14	AGES 70 AND OVER	-0.31	-0.6	-0.3	-0.8	-1.1	-1.3	-1.3	-1.5	-0.4	0.3	1.0
15	AGES 16 TO 19	1.41	1.3	1.3	1.1	0.9	0.8	0.3	-0.0	-0.3	-0.9	-0.8
16	AGES 20 TO 24	1.91	1.2	0.3	0.1	-0.7	-0.3	-0.6	-0.3	-0.6	-1.1	-1.3
17	AGES 25 TO 29	0.81	1.4	2.4	2.2	2.9	1.9	1.2	0.3	0.2	-0.7	-0.3
18	AGES 30 TO 34	1.41	1.9	1.9	1.6	1.5	1.6	1.8	2.2	2.2	2.0	1.9
19	AGES 35 TO 39	1.41	1.3	0.6	0.8	0.6	0.8	1.5	2.6	1.9	1.4	1.6
20	AGES 40 TO 44	2.31	2.3	2.7	2.1	2.0	2.1	2.0	1.9	1.6	1.4	1.6
21	AGES 45 TO 49	1.81	1.5	1.4	1.3	1.1	1.1	1.0	1.0	1.0	1.0	0.8
22	AGES 50 TO 54	-0.21	-0.6	-0.9	-2.2	-3.1	-3.4	-3.7	-2.4	-0.4	0.8	-0.6
23	AGES 55 TO 59	-0.21	-1.7	-1.6	-2.7	-4.7	-4.2	-2.5	-0.5	1.9	2.1	-3.1
24	AGES 60 TO 64	2.21	0.5	-0.2	-1.7	-1.5	-2.7	-4.8	-4.1	-2.5	-0.6	1.9
25	AGES 65 TO 69	2.21	1.4	0.9	0.9	-0.1	-0.5	-0.8	-1.5	-2.9	-1.0	-3.2
26	AGES 70 AND OVER	3.01	4.1	4.1	5.2	2.4	1.9	1.7	1.7	1.5	1.0	0.6
27	AGES 16 TO 19	3.41	2.9	2.5	2.1	5.8	4.3	4.1	3.7	3.6	2.1	1.8
28	AGES 20 TO 24	5.81	4.0	3.3	1.8	7.8	3.2	4.1	4.2	5.1	-0.3	1.7
29	AGES 25 TO 29	1.11	1.7	1.7	2.5	3.5	5.7	4.0	3.2	1.7	7.7	3.1
30	AGES 30 TO 34	-1.11	-1.2	-1.1	-0.7	-0.4	-0.1	0.2	0.1	1.2	2.1	3.5
31	AGES 35 TO 39	-1.31	-1.4	-1.6	-0.1	0.5	1.1	1.7	1.6	2.4	3.5	5.7
32	AGES 40 TO 44	-0.71	-1.0	-0.7	-1.3	-1.4	-1.3	-1.4	-1.6	-0.1	0.5	1.1
33	AGES 45 TO 49	1.41	1.3	1.2	1.0	0.8	0.6	-0.0	-0.2	-0.6	-1.1	-1.0
34	AGES 50 TO 54	1.81	1.0	0.2	0.1	-0.8	-0.7	-1.0	-0.7	-1.3	-1.4	-1.3
35	AGES 55 TO 59	0.71	1.6	2.3	2.0	2.6	1.9	1.0	0.2	0.1	-0.8	-0.7
36	AGES 60 TO 64	3.11	2.1	2.1	1.9	1.7	1.8	2.0	2.2	1.9	2.0	1.8
37	AGES 65 TO 69	1.41	1.0	0.4	0.7	0.6	0.7	1.6	2.4	2.1	2.6	1.8
38	AGES 70 AND OVER	2.81	2.8	2.9	2.4	2.3	2.3	2.2	2.1	1.8	1.7	1.8
BOTH SEXES, TOTAL												
43	AGES 16 TO 19	1.71	1.5	1.4	1.1	1.1	1.1	1.0	1.0	1.0	1.0	0.8
44	AGES 20 TO 24	-0.21	-0.6	-0.8	-2.3	-3.2	-3.5	-3.8	-2.4	-0.4	0.9	-0.7
45	AGES 25 TO 34	2.01	1.4	0.9	1.0	-0.2	-0.5	-0.8	-1.6	-3.0	-1.2	-3.3
46	AGES 35 TO 39	3.51	3.2	3.4	3.6	1.1	1.8	1.7	1.7	1.5	1.0	0.6
47	AGES 40 TO 44	3.51	3.0	2.5	2.2	6.0	4.4	4.1	3.8	3.6	3.3	2.4
48	AGES 45 TO 54	-1.01	-1.1	-1.0	-0.7	-0.4	-0.1	0.1	0.0	1.2	2.1	3.6
49	AGES 55 TO 64	1.41	1.3	1.2	1.0	0.9	0.7	0.1	-0.1	-0.5	-1.0	-0.9
50	AGES 65 AND OVER	2.51	2.0	2.0	1.7	1.6	1.7	1.9	2.2	1.9	2.0	1.8

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TABLE 15.10 MANHOURS (BILLIONS)

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NHMTMG	B MINING	1.951	1.97	1.93	1.91	1.91	1.92	1.92	1.94	1.97	1.99	2.01
2	NHMTIME	I MANUFACTURING	42.471	43.36	43.52	43.74	44.19	44.40	44.42	44.82	45.19	45.36	45.25
3	NHMTIME	I DURABLE GOODS	25.701	26.46	26.64	26.90	27.34	27.56	27.60	27.98	28.31	28.45	28.35
4	NHMTIME	B LUMBER	1.381	1.39	1.39	1.41	1.44	1.46	1.48	1.50	1.52	1.55	1.57
5	NHMTIME	B FURNITURE	1.091	1.13	1.15	1.15	1.17	1.18	1.19	1.21	1.22	1.24	1.24
6	NHMTIME	B STONE, CLAY AND GLASS	1.501	1.57	1.61	1.61	1.61	1.61	1.61	1.64	1.67	1.68	1.69
7	NHMTIME	B PRIMARY METALS	2.681	2.74	2.74	2.77	2.83	2.86	2.83	2.85	2.85	2.81	2.74
8	NHMTIME	B FABRICATED METAL PRODUCTS	3.251	3.32	3.36	3.40	3.47	3.51	3.51	3.56	3.61	3.63	3.61
9	NHMTIME	B NONELECTRICAL MACHINERY	4.951	5.04	5.13	5.22	5.35	5.43	5.47	5.60	5.71	5.79	5.78
10	NHMTIME	B ELECTRICAL MACHINERY	4.291	4.48	4.47	4.48	4.51	4.52	4.52	4.55	4.57	4.58	4.56
11	NHMTIME	B MOTOR VEHICLES	2.121	2.15	2.14	2.16	2.17	2.17	2.17	2.18	2.19	2.18	2.15
12	NHMTIME	B NONAUTO TRANS. EQ + MISC	3.281	3.44	3.42	3.46	3.51	3.53	3.53	3.58	3.62	3.65	3.65
13	NHMTIME	B INSTRUMENTS	1.161	1.22	1.23	1.24	1.26	1.28	1.29	1.31	1.33	1.35	1.36
14	NHMTIME	I NONDURABLE GOODS	16.771	16.89	16.88	16.84	16.85	16.84	16.82	16.84	16.88	16.91	16.90
15	NHMTIME	B FOOD AND BEVERAGES	3.621	3.56	3.49	3.42	3.35	3.28	3.21	3.17	3.14	3.12	3.11
16	NHMTIME	B TOBACCO	0.141	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12
17	NHMTIME	B TEXTILES	2.041	2.03	2.01	2.01	2.03	2.05	2.05	2.07	2.08	2.09	2.08
18	NHMTIME	B APPAREL	2.401	2.44	2.43	2.43	2.43	2.42	2.40	2.39	2.37	2.34	2.31
19	NHMTIME	B PAPER	1.571	1.60	1.61	1.63	1.65	1.67	1.68	1.69	1.69	1.70	1.70
20	NHMTIME	B PRINTING AND PUBLISHING	2.221	2.29	2.12	2.14	2.16	2.19	2.42	2.46	2.50	2.54	2.57
21	NHMTIME	B CHEMICALS	2.321	2.33	2.34	2.30	2.29	2.28	2.28	2.29	2.30	2.31	2.31
22	NHMTIME	B PETROLEUM	0.461	0.48	0.48	0.48	0.47	0.47	0.46	0.45	0.45	0.44	0.43
23	NHMTIME	B RUBBER	1.461	1.49	1.52	1.54	1.58	1.61	1.64	1.67	1.70	1.73	1.75
24	NHMTIME	B LEATHER	0.521	0.53	0.55	0.55	0.55	0.55	0.54	0.53	0.53	0.53	0.52

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TABLE 15.20 MANHOURS, GROWTH RATES

LINE	VAR LABEL	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NMLTIMG	B MINING	2.11	1.4	-2.3	-1.0	0.3	0.5	0.0	1.0	1.4	1.3	0.6
2	NMLTIMG	I MANUFACTURING	3.61	2.1	0.4	0.5	1.0	0.5	0.0	0.9	0.8	0.4	-0.2
3	NMLTIMG	I DURABLE GOODS	5.31	3.0	0.7	1.0	1.6	0.8	0.2	1.4	1.2	0.5	-0.3
4	NMLTIMG	B LUMBER	3.31	0.5	-0.0	1.5	2.1	1.7	1.2	1.0	1.5	1.7	1.5
5	NMLTIMG	B FURNITURE	5.91	3.6	1.9	0.3	1.6	0.7	0.7	2.1	0.6	1.3	0.5
6	NMLTIMG	B STONE, CLAY AND GLASS	6.71	4.5	2.7	-0.1	0.4	0.1	-0.1	1.5	1.8	1.1	0.1
7	NMLTIMG	B PRIMARY METALS	4.21	2.1	0.0	1.0	2.5	1.0	-1.1	0.6	0.1	-1.2	-2.6
8	NMLTIMG	B FABRICATED METAL PRODUCTS	5.21	2.3	1.0	1.4	2.1	1.0	0.1	1.5	1.3	0.5	-0.4
9	NMLTIMG	B NONELECTRICAL MACHINERY	4.71	1.8	1.8	1.7	2.4	1.6	0.7	2.4	2.2	1.1	-0.2
10	NMLTIMG	B ELECTRICAL MACHINERY	6.01	4.4	-0.1	0.1	0.7	0.3	-0.1	0.7	0.5	0.1	-0.4
11	NMLTIMG	B MOTOR VEHICLES	1.61	1.5	-0.2	0.6	0.5	0.0	-0.1	0.8	0.3	-0.6	-1.3
12	NMLTIMG	B NONAUTO TRANS. EQ. + ORD. + MISC	6.31	4.6	-0.6	1.2	1.5	0.5	0.1	1.3	1.2	0.7	0.1
13	NMLTIMG	B INSTRUMENTS	4.91	4.7	1.1	1.2	1.7	1.2	0.8	1.7	1.6	1.2	0.7
14	NMLTIMG	I NONDURABLE GOODS	1.41	0.8	-0.1	-0.2	0.0	-0.1	-0.1	0.1	0.2	0.2	-0.1
15	NMLTIMG	B FOOD AND BEVERAGES	1.41	-1.6	-1.9	-2.2	-2.0	-2.1	-2.0	-1.5	-1.0	-0.6	-0.3
16	NMLTIMG	B TOBACCO	0.11	-1.3	-1.5	-1.4	-1.2	-1.1	-1.0	-0.7	-1.1	-1.2	-1.3
17	NMLTIMG	B TEXTILES	-0.91	-0.6	-1.1	0.2	0.9	0.7	0.4	0.7	0.6	0.4	-0.4
18	NMLTIMG	B APPAREL	1.31	1.5	-0.3	-0.0	-0.0	-0.3	-0.8	-0.7	-0.8	-1.0	-1.2
19	NMLTIMG	B PAPER	1.01	1.6	0.8	1.2	1.3	1.1	0.5	0.6	0.5	0.3	-0.1
20	NMLTIMG	B PRINTING AND PUBLISHING	1.91	1.1	1.2	1.0	0.9	1.1	1.2	1.5	1.6	1.6	1.4
21	NMLTIMG	B CHEMICALS	1.21	0.6	0.2	-1.4	-0.7	-0.5	0.2	0.4	0.5	0.3	0.0
22	NMLTIMG	B PETROLEUM	-0.51	2.6	1.0	-0.8	-0.9	-1.2	-1.3	-1.6	-1.7	-1.9	-2.1
23	NMLTIMG	B RUBBER	1.61	2.0	1.7	1.7	2.4	2.0	1.5	2.1	2.0	1.6	1.0
24	NMLTIMG	B LEATHER	2.81	2.2	2.8	0.4	-0.2	-0.7	-1.1	-0.9	-0.9	-0.9	-1.0

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TABLE 16.10 REAL OUTPUT PER MANHOUR (1972 \$ / MANHOUR)

LINE	VAR LABEL	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	XMGH	MINING	10.71	10.9	11.4	12.0	12.5	12.9	13.2	13.6	14.0	14.2	14.5
2													
3	XMFH	MANUFACTURING	8.11	8.2	8.4	8.7	8.9	9.2	9.4	9.7	10.0	10.2	10.5
4													
5	XMFDMH	DURABLE GOODS	7.91	8.0	8.2	8.4	8.7	8.9	9.1	9.3	9.6	9.8	10.0
6													
7	XMFED24MH	LUMBER	7.21	7.5	7.8	8.0	8.3	8.4	8.5	8.8	9.1	9.4	9.6
8	XMFED25MH	FURNITURE	4.81	4.8	4.9	5.0	5.2	5.3	5.4	5.6	5.8	5.9	5.9
9	XMFED32MH	STONE, CLAY AND GLASS	7.21	7.2	7.2	7.3	7.5	7.7	7.9	8.1	8.3	8.4	8.6
10	XMFED33MH	PRIMARY METALS	7.81	8.0	8.1	8.3	8.4	8.5	8.5	8.6	8.7	8.7	8.8
11	XMFED34MH	FABRICATED METAL PRODUCTS	6.51	6.6	6.7	6.8	6.9	7.1	7.2	7.3	7.4	7.6	7.7
12	XMFED35MH	NON-ELECTRICAL MACHINERY	7.61	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.1	9.3	9.5
13	XMFED36MH	ELECTRICAL MACHINERY	7.61	7.8	8.0	8.2	8.5	8.8	9.1	9.5	9.8	10.2	10.5
14	XMFED37MH	MOTOR VEHICLES	16.41	16.5	17.0	17.7	18.5	19.2	19.8	20.6	21.4	22.3	23.0
15	XMFED37SP2MH	NON-AUTO TRAN EQ & MISC MFD	6.51	6.6	6.7	6.9	7.1	7.2	7.3	7.5	7.7	7.9	8.0
16	XMFED38MH	INSTRUMENTS	7.91	7.9	8.0	8.3	8.6	8.8	9.0	9.3	9.5	9.7	9.9
17													
18	XMFENH	NON-DURABLE GOODS	8.31	8.5	8.7	9.0	9.4	9.7	10.0	10.3	10.6	10.9	11.2
19													
20	XMFEN20MH	FOOD AND BEVERAGES	9.01	9.4	9.6	10.1	10.6	11.0	11.5	11.9	12.3	12.6	12.9
21	XMFEN21MH	TOBACCO	35.21	36.4	37.6	39.3	41.1	42.9	44.6	46.9	49.6	52.3	54.8
22	XMFEN22MH	TEXTILES	4.91	5.1	5.2	5.4	5.6	5.7	5.9	6.1	6.2	6.3	6.5
23	XMFEN23MH	APPAREL	5.21	5.3	5.5	5.7	5.9	6.1	6.3	6.6	6.9	7.2	7.5
24	XMFEN26MH	PAPER	8.11	8.4	8.5	8.8	9.1	9.4	9.6	9.9	10.3	10.6	10.9
25	XMFEN27MH	PRINTING AND PUBLISHING	7.61	7.7	8.0	8.2	8.4	8.5	8.6	8.8	8.9	9.1	9.2
26	XMFEN28MH	CHEMICALS	11.71	12.0	12.3	13.0	13.7	14.3	14.7	15.3	15.9	16.5	17.0
27	XMFEN29MH	PETROLEUM	19.41	19.6	20.1	20.8	21.7	22.5	23.3	24.5	25.7	26.9	28.1
28	XMFEN30MH	RUBBER	7.31	7.4	7.6	7.8	8.0	8.1	8.3	8.5	8.7	8.8	9.0
29	XMFEN31MH	LEATHER	4.61	4.8	4.8	4.8	4.9	5.1	5.2	5.4	5.5	5.7	5.8

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TABLE 16.20 REAL OUTPUT PER MANHOUR, % CHANGE

LINE	VAR LABEL	ITEM	1979	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	XMF001	MINING	2.71	2.1	4.5	5.0	4.3	2.9	2.5	3.2	2.4	2.1	2.1
2	XMF002												
3	XMF003	MANUFACTURING	2.51	2.1	1.9	3.2	3.4	2.6	2.4	3.1	2.8	2.5	2.4
4	XMF004												
5	XMF005	DURABLE GOODS	1.21	1.7	1.6	2.9	3.1	2.3	2.2	2.9	2.6	2.3	2.2
6	XMF006												
7	XMF007	LUMBER	4.51	3.5	3.8	3.1	3.5	1.8	1.1	2.4	4.1	2.9	2.1
8	XMF008	FURNITURE	-0.11	0.4	1.6	2.4	3.1	2.4	2.5	3.1	3.6	1.5	1.1
9	XMF009	STONE, CLAY AND GLASS	-2.51	0.2	-0.4	1.4	2.7	2.4	2.4	3.0	3.0	1.6	1.7
10	XMF010	PRIMARY METALS	-0.81	2.5	1.7	1.9	1.7	0.7	0.1	1.5	0.9	0.5	0.9
11	XMF011	FABRICATED METAL PRODUCTS	-0.71	2.2	1.2	2.0	2.1	1.5	1.6	2.2	1.7	1.5	1.5
12	XMF012	NONFABRICATED METAL PRODUCTS	2.91	3.1	1.8	3.0	3.0	1.9	2.0	2.2	1.8	1.8	1.9
13	XMF013	ELECTRICAL MACHINERY	2.31	2.1	0.8	4.0	4.0	3.6	3.5	3.9	3.7	3.5	1.4
14	XMF014	MOTOR VEHICLES	5.01	0.2	3.3	3.9	4.9	3.5	3.1	4.3	4.0	3.8	3.3
15	XMF015	NONAUTO TRAN EQ & ORD & MISC MFD	-1.31	1.9	1.3	2.5	2.4	1.9	2.0	2.6	2.3	2.1	2.0
16	XMF016	INSTRUMENTS	-0.01	0.8	1.5	3.0	3.2	2.6	2.4	3.0	2.6	2.3	2.0
17	XMF017												
18	XMF018	NONDURABLE GOODS	4.31	2.7	2.3	3.7	3.8	3.2	2.8	3.5	3.2	2.9	2.7
19	XMF019												
20	XMF020	FOOD AND BEVERAGES	3.31	4.2	1.9	5.0	4.9	4.5	4.0	3.9	3.2	2.7	2.1
21	XMF021	TOBACCO	3.21	3.6	3.1	4.6	4.8	4.2	3.9	5.2	5.7	5.4	4.8
22	XMF022	APPAREL	7.91	1.9	2.9	3.8	3.7	3.3	3.7	4.5	4.4	4.3	4.2
23	XMF023	TEXTILES	5.51	4.1	2.7	3.7	3.3	2.5	2.2	3.0	2.6	2.3	2.6
24	XMF024	PAPER	6.31	2.8	1.9	3.1	3.6	2.9	2.4	3.7	3.5	3.1	2.9
25	XMF025	PRINTING AND PUBLISHING	5.11	1.9	3.5	2.0	2.4	1.6	1.4	2.0	1.7	1.5	1.2
26	XMF026	CHEMICALS	5.31	2.7	2.5	5.3	5.3	4.4	3.1	4.2	3.9	3.5	3.3
27	XMF027	PETROLEUM	4.01	1.2	2.1	3.9	4.2	3.6	3.6	5.0	5.0	4.8	4.4
28	XMF028	RUBBER	1.51	1.3	2.0	3.0	2.6	1.7	1.6	2.5	2.1	1.9	1.7
29	XMF029	LEATHER	3.71	3.3	-0.2	1.8	2.2	2.4	2.6	3.1	3.0	2.9	2.9

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TABLE 17.10 AVERAGE WEEKLY HOURS

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NNHPMG	B MINING	43.38	42.72	42.95	43.27	43.68	43.97	44.08	44.22	44.29	44.26	44.06
2	NNHPMF	I MANUFACTURING	40.30	40.29	40.14	40.11	40.19	40.20	40.20	40.29	40.35	40.35	40.29
3	NNHPMF	I DURABLE GOODS	40.92	40.91	40.74	40.71	40.79	40.77	40.72	40.81	40.85	40.81	40.71
4	NNHPMF	I DURABLE GOODS	40.92	40.91	40.74	40.71	40.79	40.77	40.72	40.81	40.85	40.81	40.71
5	NNHPMF	I DURABLE GOODS	40.92	40.91	40.74	40.71	40.79	40.77	40.72	40.81	40.85	40.81	40.71
6	NNHPMF024	B LUMBER	39.87	39.78	39.91	39.90	39.91	39.87	39.77	39.65	39.57	39.49	39.39
7	NNHPMF025	B FURNITURE	39.24	39.79	40.04	39.98	40.10	40.08	40.10	40.24	40.23	40.23	40.10
8	NNHPMF032	B STONE, CLAY AND GLASS	41.64	41.74	42.17	42.18	42.21	42.17	42.11	42.20	42.26	42.19	42.03
9	NNHPMF033	B PRIMARY METALS	41.17	41.24	41.23	41.33	41.60	41.53	41.48	41.66	41.75	41.71	41.45
10	NNHPMF034	B FABRICATED METAL PRODUCTS	40.80	40.58	40.12	40.28	40.37	40.35	40.29	40.42	40.49	40.48	40.42
11	NNHPMF035	B NON-ELECTRICAL MACHINERY	41.60	41.20	41.08	41.11	41.29	41.28	41.20	41.35	41.39	41.29	41.13
12	NNHPMF036	B ELECTRICAL MACHINERY	40.35	40.47	40.14	40.05	40.04	40.00	39.95	39.96	39.94	39.90	39.84
13	NNHPMF037	B MOTOR VEHICLES	42.19	41.78	41.29	41.01	40.90	40.84	40.83	40.96	41.03	41.04	41.02
14	NNHPMF037SP2	B NON-AUTO TRANS & ORP + MISC	40.83	41.11	40.76	40.76	40.80	40.79	40.79	40.87	40.91	40.92	40.92
15	NNHPMF038	B INSTRUMENTS	40.35	40.73	40.52	40.50	40.56	40.56	40.56	40.66	40.70	40.70	40.67
16	NNHPMF	I NONDURABLE GOODS	39.36	39.37	39.23	39.18	39.24	39.30	39.37	39.46	39.53	39.59	39.60
17	NNHPMF	I NONDURABLE GOODS	39.36	39.37	39.23	39.18	39.24	39.30	39.37	39.46	39.53	39.59	39.60
18	NNHPMF	I NONDURABLE GOODS	39.36	39.37	39.23	39.18	39.24	39.30	39.37	39.46	39.53	39.59	39.60
19	NNHPMF	I NONDURABLE GOODS	39.36	39.37	39.23	39.18	39.24	39.30	39.37	39.46	39.53	39.59	39.60
20	NNHPMF020	B FOOD AND BEVERAGES	39.91	39.85	39.56	39.19	39.09	39.05	38.98	38.89	38.80	38.76	38.78
21	NNHPMF021	B TOBACCO	38.09	37.72	37.22	36.92	36.78	36.75	36.79	36.92	36.90	36.85	36.81
22	NNHPMF022	B TEXTILES	39.51	39.05	38.81	38.80	39.08	39.23	39.34	39.50	39.66	39.78	39.65
23	NNHPMF023	B APPAREL	35.43	35.70	35.55	35.57	35.67	35.79	35.84	35.90	35.96	36.01	36.06
24	NNHPMF026	B PAPER	42.34	42.26	42.19	42.35	42.55	42.73	42.86	43.02	43.19	43.35	43.48
25	NNHPMF027	B PRINTING AND PUBLISHING	38.01	38.41	38.43	38.47	38.55	38.64	38.71	38.80	38.88	38.94	38.94
26	NNHPMF028	B CHEMICALS	41.74	41.73	41.67	41.60	41.60	41.59	41.86	42.07	42.22	42.30	42.31
27	NNHPMF029	B PETROLEUM	42.11	42.19	41.90	41.76	41.65	41.56	41.49	41.43	41.40	41.38	41.37
28	NNHPMF030	B RUBBER	40.86	40.96	40.80	40.80	40.91	40.96	40.96	41.04	41.11	41.13	41.09
29	NNHPMF031	B LEATHER	36.72	36.45	36.76	36.84	36.87	36.86	36.83	36.86	36.91	36.96	37.02

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TABLE 17.20 AVERAGE WEEKLY HOURS, &amp; CHANGE

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NNNPHG	B MINING	-1.61	-1.5	0.5	0.8	0.9	0.7	0.2	0.3	0.2	-0.1	-0.5
2	NNNPMF	I MANUFACTURING	-0.01	-0.0	-0.4	-0.1	0.2	0.0	-0.0	0.2	0.1	-0.0	-0.1
3	NNNPMF	I DURABLE GOODS	0.11	-0.1	-0.4	-0.1	0.2	-0.1	-0.1	0.2	0.1	-0.1	-0.2
4	NNNPMF	B LUMBER	-0.61	-0.2	0.3	-0.0	0.0	-0.1	-0.2	-0.3	-0.2	-0.2	-0.3
5	NNNPMF	B FURNITURE	1.11	1.4	0.6	-0.2	0.3	-0.1	0.1	0.4	-0.0	0.0	-0.3
6	NNNPMF	B STONE, CLAY AND GLASS	0.61	0.2	1.0	0.0	0.1	-0.1	-0.2	0.2	0.1	-0.2	-0.4
7	NNNPMF	B PRIMARY METALS	0.21	0.2	-0.0	0.2	0.7	0.3	-0.4	0.4	0.2	-0.1	-0.6
8	NNNPMF	B FABRICATED METAL PRODUCTS	-0.21	-0.6	-0.6	-0.1	0.2	-0.1	-0.1	0.3	0.2	-0.0	-0.2
9	NNNPMF	B NON-ELECTRICAL MACHINERY	-0.01	-1.0	-0.3	0.1	0.4	-0.0	-0.2	0.3	0.1	-0.2	-0.4
10	NNNPMF	B ELECTRICAL MACHINERY	0.41	0.3	-0.8	-0.2	-0.0	-0.1	-0.1	0.0	-0.0	-0.1	-0.1
11	NNNPMF	B MOTOR VEHICLES	-4.31	-1.0	-1.2	-0.7	-0.3	-0.1	-0.0	0.3	0.2	0.0	-0.0
12	NNNPMF	B NON-AUTO TRAN EQUIP & MISC	1.81	0.7	-0.8	0.0	0.1	-0.0	-0.0	0.2	0.1	0.0	-0.0
13	NNNPMF	B INSTRUMENTS	-0.11	1.0	-0.5	-0.1	0.2	0.0	-0.0	0.2	0.1	-0.0	-0.1
14	NNNPMF	I NONDURABLE GOODS	-0.11	0.0	-0.3	-0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.0
15	NNNPMF	B FOOD AND BEVERAGES	0.01	-0.1	-0.7	-0.9	-0.3	-0.1	-0.2	-0.2	-0.2	-0.1	0.0
16	NNNPMF	B TOBACCO	-0.51	-1.0	-1.3	-0.8	-0.4	-0.1	0.1	0.4	-0.1	-0.1	-0.1
17	NNNPMF	B TEXTILES	-2.21	-1.2	-0.6	0.2	0.5	0.4	0.3	0.4	0.4	0.3	-0.3
18	NNNPMF	B APPAREL	0.11	0.8	-0.4	0.1	0.3	0.3	0.1	0.2	0.2	0.1	0.1
19	NNNPMF	B PAPER	-1.11	-0.2	-0.2	0.4	0.5	0.4	0.3	0.4	0.4	0.4	0.3
20	NNNPMF	B PRINTING AND PUBLISHING	0.61	1.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.0
21	NNNPMF	B CHEMICALS	0.11	-0.0	-0.1	-0.2	-0.0	-0.0	0.6	0.5	0.4	0.2	0.0
22	NNNPMF	B PETROLEUM	-1.41	-0.3	-0.7	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.0	-0.0
23	NNNPMF	B RUBBER	-0.31	0.2	-0.4	0.0	0.3	0.1	0.0	0.2	0.2	0.0	-0.1
24	NNNPMF	B LEATHER	-0.81	-0.7	0.9	0.2	0.1	-0.0	-0.1	0.1	0.1	0.2	0.2

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WHARTON ANNUAL AND INDUSTRY FINECASTING MODEL  
POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 18.10 CAPITAL STOCK (1972 \$)

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	KIAG	I FARM	45,531	46,62	47,04	48,15	50,39	53,14	56,42	59,65	62,91	66,08	69,07
2	KIAG	I MINING	21,62	22,34	23,19	24,28	25,59	26,96	28,27	29,62	31,13	32,96	34,99
3	KIAG	I DURABLE GOODS											
4	KIAG	I LUMBER	10,64	11,01	11,34	11,72	12,16	12,67	13,21	13,80	14,43	15,12	15,86
5	KIAG	I FURNITURE	1,831	1,86	1,89	1,93	1,97	2,00	2,04	2,09	2,14	2,20	2,25
6	KIAG	I STONE, CLAY AND GLASS	17,54	18,03	18,57	19,14	19,90	20,74	21,57	22,35	23,14	23,97	24,85
7	KIAG	I PRIMARY METALS	36,851	37,95	39,15	40,51	41,85	43,17	44,45	45,83	47,29	48,68	49,92
8	KIAG	I FABRICATED METAL PRODUCTS	19,301	19,94	20,54	21,20	21,87	22,56	23,27	23,98	24,70	25,41	26,13
9	KIAG	I NONELECTRICAL MACHINERY	44,191	46,52	48,69	50,95	53,34	55,79	58,25	60,84	63,60	66,48	69,41
10	KIAG	I ELECTRICAL MACHINERY	27,411	28,41	29,41	30,58	31,86	33,16	34,47	35,78	37,19	38,69	40,26
11	KIAG	I MOTOR VEHICLES	18,041	20,15	21,58	22,97	24,15	24,98	25,70	26,59	27,67	28,76	29,68
12	KIAG	I MONAUTO TRANS EQ + ORG + MISC	9,551	9,76	9,99	10,28	10,63	11,01	11,39	11,80	12,25	12,75	13,28
13	KIAG	I INSTRUMENTS	9,091	9,46	9,85	10,26	10,72	11,21	11,70	12,23	12,81	13,41	14,01
14	KIAG	I NONDURABLE GOODS											
15	KIAG	I FOOD AND BEVERAGES	27,731	28,26	28,78	29,32	29,75	30,12	30,54	31,14	31,95	32,95	34,16
16	KIAG	I TOBACCO	1,461	1,50	1,54	1,58	1,63	1,68	1,74	1,80	1,87	1,94	2,02
17	KIAG	I TEXTILES	7,341	7,36	7,40	7,48	7,62	7,78	7,96	8,14	8,34	8,54	8,73
18	KIAG	I APPAREL	2,061	2,08	2,11	2,16	2,21	2,27	2,34	2,42	2,51	2,62	2,73
19	KIAG	I PAPER	28,821	29,17	29,53	29,90	30,36	30,81	31,26	31,81	32,42	33,15	33,91
20	KIAG	I PRINTING AND PUBLISHING	7,541	7,58	7,64	7,71	7,81	7,93	8,07	8,26	8,50	8,77	9,07
21	KIAG	I CHEMICALS	40,291	41,54	42,89	44,43	46,13	48,11	50,32	52,62	55,05	57,76	60,56
22	KIAG	I PETROLEUM	98,761	101,05	104,78	108,54	112,62	116,95	121,34	125,68	129,93	134,08	138,20
23	KIAG	I RUBBER	13,861	14,35	14,87	15,42	16,14	16,90	17,71	18,58	19,55	20,59	21,66
24	KIAG	I LEATHER	1,651	1,68	1,71	1,74	1,77	1,81	1,85	1,89	1,93	1,97	2,00
25	KIAG	I TRANSPORTATION	60,131	59,98	59,74	59,73	59,66	59,55	59,59	59,90	60,55	61,60	63,01
26	KIAG	I UTILITIES	209,531	219,44	229,69	240,19	251,02	262,35	274,16	286,54	299,56	313,21	327,49
27	KIAG	I COMMUNICATIONS	113,421	117,69	122,57	128,04	133,93	140,25	146,86	153,71	160,95	168,66	176,80
28	KIAG	I COMMERCIAL AND OTHER	417,031	436,46	450,68	465,14	480,43	496,05	512,10	529,58	547,96	566,96	586,12
29	KIAG	I COMMERCIAL	196,251	197,47	199,12	201,40	204,42	208,11	212,48	217,68	223,66	230,26	237,31
30	KIAG	I STOCK OF REAL WEALTH	1276,41	1321,6	1364,4	1401,3	1441,6	1486,1	1530,6	1574,2	1624,5	1677,2	1729,1
31	KIAG	I STOCK OF AUTOS	156,01	159,7	162,4	166,8	172,2	177,2	181,2	186,1	191,7	197,4	201,9
32	KIAG	I STOCK OF NONFARM RESID. STRUCTURES	717,31	730,7	740,1	752,9	771,2	789,9	808,0	831,4	857,1	880,9	900,1
33	KIAG	I TOTAL NONFARM INVENTORIES	278,651	285,65	290,34	298,54	310,71	324,10	338,12	354,28	371,85	389,90	407,43
34	KIAG	I STOCK OF AUTO DEALER INVENTORIES	9,711	9,85	9,80	9,97	10,08	10,45	10,97	11,54	12,05	12,58	13,16
35	KIAG	I STOCK OF MANUFACTURERS INVENTORIES	134,241	137,94	140,13	143,57	149,31	155,82	162,83	170,71	179,20	188,07	196,58
36	KIAG	I STOCK OF NONMFG NONAUTO INVEN	138,991	137,85	140,40	145,00	151,31	157,83	164,31	172,04	180,60	189,24	197,69

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TABLE 10.20 CAPITAL STOCK, GROWTH RATES

LINE	VAR LABEL	I T C M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	KTAAG	I FARM	1.0	2.4	0.9	2.8	4.2	5.5	6.2	5.7	5.5	5.0	4.5
2													
3	KIANG	I MINING	2.9	3.3	3.8	4.7	5.4	5.4	4.9	4.8	5.1	5.9	6.2
4													
5		DURABLE GOODS											
6													
7	KIAMD24	I LUMBER	3.2	3.4	3.1	3.3	3.8	4.2	4.3	4.4	4.6	4.8	4.9
8	KIAMD25	I FURNITURE	1.2	1.4	1.5	2.2	2.0	1.8	2.1	2.3	2.3	2.6	2.7
9	KIAMD12	I STONE, CLAY AND GLASS	2.8	2.7	3.0	3.1	4.0	4.2	4.0	3.6	3.5	3.6	3.7
10	KIAMD13	I PRIMARY METALS	2.3	3.0	3.2	3.5	3.3	3.1	3.0	3.1	3.2	2.9	2.5
11	KIAMD14	I FABRICATED METAL PRODUCTS	3.2	3.3	3.0	3.2	3.1	3.2	3.1	3.1	3.0	2.9	2.8
12	KIAMD15	I NONELECTRICAL MACHINERY	4.4	4.8	4.7	4.6	4.7	4.6	4.4	4.4	4.5	4.5	4.4
13	KIAMD16	I ELECTRICAL MACHINERY	2.9	3.6	3.5	4.0	4.2	4.1	3.9	3.8	3.9	4.0	4.1
14	KIAMD17	I MOTOR VEHICLES	6.1	7.0	7.1	6.4	5.1	3.4	2.9	3.5	4.1	3.9	3.2
15	KIAMD17SP2	I NONAUTO TRANS EQ + ORG + MISC	1.7	2.3	2.3	3.0	3.4	3.6	3.5	3.6	3.8	4.1	4.2
16	KIAMD18	I INSTRUMENTS	4.1	4.0	4.1	4.2	4.5	4.5	4.4	4.5	4.7	4.7	4.5
17													
18		NONDURABLE GOODS											
19													
20	KIAMFN20	I FOOD AND BEVERAGES	2.1	1.9	1.8	1.9	1.5	1.2	1.4	2.0	2.6	3.1	3.6
21	KIAMFN21	I TOBACCO	2.7	2.5	2.5	2.8	3.1	3.3	3.5	3.7	3.8	3.8	3.9
22	KIAMFN22	I TEXTILES	0.1	0.2	0.5	1.1	1.8	2.2	2.2	2.4	2.5	2.4	2.2
23	KIAMFN23	I APPAREL	1.1	1.0	1.4	2.0	2.3	2.7	3.1	3.6	4.0	4.2	4.3
24	KIAMFN26	I PAPER	4.8	5.4	5.2	5.0	5.1	5.2	5.2	5.1	5.3	5.3	5.3
25	KIAMFN27	I PRINTING AND PUBLISHING	0.5	0.5	0.8	1.0	1.2	1.5	1.9	2.3	2.8	3.2	3.5
26	KIAMFN28	I CHEMICALS	3.1	3.1	3.2	3.4	3.8	4.3	4.6	4.6	4.6	4.9	4.8
27	KIAMFN29	I PETROLEUM	5.0	4.4	3.7	3.6	3.8	3.8	3.8	3.6	3.4	3.2	3.1
28	KIAMFN30	I RUBBER	3.4	3.6	3.6	3.7	4.6	4.8	4.7	4.9	5.2	5.3	5.2
29	KIAMFN31	I LEATHER	1.3	1.4	1.7	2.1	1.8	2.0	2.1	2.1	2.1	2.1	1.9
30													
31	KIARTGT	I TRANSPORTATION	0.0	-0.3	-0.4	-0.0	-0.1	-0.2	0.1	0.5	1.1	1.7	2.3
32													
33	KIARGU9	I UTILITIES	4.7	4.7	4.7	4.6	4.5	4.5	4.5	4.5	4.5	4.6	4.6
34													
35	KIARGC8	I COMMUNICATIONS	3.6	3.8	4.1	4.5	4.6	4.7	4.7	4.7	4.7	4.8	4.8
36													
37	KIACG	I COMMERCIAL AND OTHER	5.0	4.5	3.3	3.2	3.3	3.3	3.2	3.4	3.5	3.5	3.4
38	KIACM	I COMMERCIAL	0.5	0.6	0.8	1.1	1.5	1.8	2.1	2.5	2.7	3.0	3.1
39													
40	KHGP	I STOCK OF REAL WEALTH	3.0	3.5	3.2	2.7	2.9	3.1	3.0	2.8	3.2	3.2	3.1
41													
42	KCEDA	I STOCK OF AUTOS	5.0	2.4	1.7	2.7	3.3	2.9	2.3	2.7	3.0	3.0	2.3
43													
44	KHFRN	I STOCK OF NONFARM RESID. STRUCTURES	3.1	1.9	1.3	1.7	2.4	2.4	2.3	2.9	3.1	2.8	2.2
45													
46	KHIN	I TOTAL NONFARM INVENTORIES	4.4	2.4	1.6	2.8	4.1	4.3	4.3	4.8	5.0	4.9	4.5
47	KHITDAV	I STOCK OF AUTO DEALER INVENTORIES	-1.0	1.4	-0.5	1.7	1.0	3.7	5.0	5.2	4.5	4.4	4.6
48	KHINMF	I STOCK OF MANUFACTURER INVENTORIES	4.2	2.8	1.6	2.5	4.0	4.4	4.5	4.8	5.0	5.0	4.5
49	KHINNH	I STOCK OF NONMFG NONAUTO INVENTORIES	5.1	2.2	1.9	3.3	4.4	4.3	4.1	4.7	5.0	4.8	4.5

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TABLE 19.00 DEPRECIATION (CURRENT \$)

LINE	VAR LABEL	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	CCATS	1 ALL INDUSTRIES	217.08	202.24	265.69	293.43	323.49	355.50	389.42	425.49	463.90	504.92	546.23
2	CCATAGS	8 AGRIC. FORESTRY & FISHERIES	10.94	11.90	13.00	14.29	15.88	17.76	20.00	22.32	24.79	27.39	30.11
3	CCATAGS	8 MINING	7.08	7.75	8.41	9.11	10.34	11.46	12.64	13.89	15.28	16.91	18.77
4	CCATAGS	1 MANUFACTURING	42.35	46.50	50.62	56.04	61.92	68.22	74.98	82.16	89.91	98.39	107.58
5	CCATAGS	1 DURABLE GOODS	24.98	27.44	29.92	33.22	36.79	40.58	44.60	48.85	53.44	58.43	63.78
6	CCATAGS	8 LUMBER	1.77	1.96	2.13	2.38	2.66	2.96	3.30	3.66	4.06	4.49	4.98
7	CCATAGS	8 FURNITURE	0.26	0.27	0.29	0.32	0.35	0.38	0.41	0.44	0.48	0.52	0.56
8	CCATAGS	8 STONE, CLAY AND GLASS	1.66	1.81	1.95	2.15	2.37	2.61	2.87	3.14	3.41	3.71	4.04
9	CCATAGS	8 PRIMARY METALS	3.85	4.14	4.44	4.77	5.11	5.47	5.85	6.24	6.67	7.11	7.56
10	CCATAGS	8 FABRICATED METAL PRODUCTS	1.49	1.63	1.76	1.96	2.14	2.34	2.55	2.77	3.00	3.24	3.49
11	CCATAGS	8 NONELECTRICAL MACHINERY	5.33	5.98	6.64	7.07	7.91	9.37	10.41	11.53	12.74	14.05	15.47
12	CCATAGS	8 ELECTRICAL MACHINERY	4.52	5.03	5.54	6.27	7.07	7.92	8.83	9.77	10.79	11.91	13.12
13	CCATAGS	8 MOTOR VEHICLES	2.96	3.20	3.45	3.73	4.22	4.57	4.93	5.33	5.78	6.26	6.74
14	CCATAGS	8 NONAUTO TRANS. & ORD. & MISC.	1.83	1.99	2.16	2.37	2.60	2.85	3.12	3.40	3.71	4.05	4.43
15	CCATAGS	8 INSTRUMENTS	1.11	1.24	1.36	1.52	1.70	1.90	2.10	2.33	2.57	2.84	3.12
16	CCATAGS	1 NONDURABLE GOODS	17.37	19.04	20.69	22.82	25.13	27.65	30.39	33.31	36.47	39.97	43.80
17	CCATAGS	8 FOOD AND BEVERAGES	3.40	3.67	3.92	4.25	4.57	4.90	5.26	5.64	6.07	6.56	7.12
18	CCATAGS	8 TOBACCO	0.43	0.44	0.53	0.60	0.68	0.76	0.85	0.95	1.05	1.17	1.29
19	CCATAGS	8 TEXTILES	1.32	1.43	1.54	1.69	1.87	2.06	2.27	2.48	2.70	2.94	3.19
20	CCATAGS	8 APPAREL	0.29	0.31	0.33	0.36	0.39	0.42	0.46	0.50	0.55	0.60	0.65
21	CCATAGS	8 PAPER	2.32	2.60	2.87	3.19	3.54	3.93	4.35	4.81	5.30	5.85	6.45
22	CCATAGS	8 PRINTING AND PUBLISHING	1.45	1.56	1.67	1.82	1.99	2.16	2.35	2.56	2.79	3.05	3.33
23	CCATAGS	8 CHEMICALS	5.25	5.79	6.33	6.98	7.69	8.48	9.34	10.30	11.31	12.45	13.69
24	CCATAGS	8 PETROLEUM	1.63	1.82	2.02	2.27	2.55	2.85	3.18	3.51	3.86	4.22	4.60
25	CCATAGS	8 RUBBER	1.18	1.28	1.39	1.55	1.74	1.95	2.17	2.42	2.69	2.99	3.32
26	CCATAGS	8 LEATHER	0.09	0.10	0.10	0.11	0.11	0.12	0.13	0.14	0.14	0.15	0.16
27	CCATAGS	8 TRANSPORTATION	9.82	10.71	11.59	12.41	13.23	14.05	14.92	15.85	16.87	18.05	19.40
28	CCATAGS	8 UTILITIES	13.33	14.98	16.65	18.75	21.00	23.45	26.10	28.92	31.95	35.25	38.88
29	CCATAGS	8 COMMUNICATIONS	12.40	14.19	15.90	17.99	20.28	22.79	25.52	28.42	31.54	34.97	38.76
30	CCATAGS	8 COMMERCIAL AND OTHER	77.22	86.27	94.13	105.44	117.85	130.95	144.66	159.53	175.36	191.94	208.94
31	CCATAGS	8 RES. STRUCTURES, SINGLE UNITS	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
32	CCATAGS	8 RES. STRUCTURES, MULTIPLE UNITS	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
33	CCATAGS	8 RES. STRUCTURES, MOBILE HOMES	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
34	CCATAGS	CAPITAL CONSUMPTION ADJUST.											
35	CCATAGS	8 CORPORATE PROFITS & INVA.	-10.12	-21.43	-24.11	-25.11	-26.11	-27.11	-28.11	-29.11	-30.11	-31.11	-32.11
36	CCATAGS	8 PROPRIETORS' INCOME, NONFARM	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
37	CCATAGS	8 PROPRIETORS' INCOME, FARM	-5.23	-5.76	-6.56	-7.36	-8.16	-8.96	-9.76	-10.56	-11.36	-12.16	-12.96
38	CCATAGS	8 RENTAL INCOME OF PERSONS	-20.94	-23.08	-25.08	-27.08	-29.08	-31.08	-33.08	-35.08	-37.08	-39.08	-41.08

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TABLE 20.00 USER COST OF CAPITAL

LINE	VAR LABEL	ITEM	1976	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	UCKAG	1 FARM	39.1	43.5	44.7	48.5	52.4	54.5	57.3	60.0	62.8	65.6	69.0
2	UCKMG	1 MINING	36.6	40.9	41.0	44.5	48.2	49.6	51.9	54.1	56.3	58.6	61.6
3	UCKMG	1 MINING	36.6	40.9	41.0	44.5	48.2	49.6	51.9	54.1	56.3	58.6	61.6
4													
5		DURABLE GOODS											
6	UCKMFD24	1 LUMBER	22.5	25.6	25.7	28.0	30.4	31.0	32.4	33.6	34.9	36.3	38.1
7	UCKMFD25	1 FURNITURE	30.8	34.5	34.8	37.0	41.0	42.1	44.0	45.8	47.6	49.5	52.1
8	UCKMFD32	1 STONE, CLAY AND GLASS	28.3	27.5	27.5	29.9	32.5	33.1	34.5	35.8	37.2	38.6	40.5
9	UCKMFD33	1 PRIMARY METALS	29.6	33.3	33.2	36.1	39.2	40.2	42.0	43.7	45.5	47.3	49.7
10	UCKMFD34	1 FABRICATED METAL PRODUCTS	24.4	27.7	27.7	30.1	32.7	33.3	34.7	36.1	37.4	38.8	40.7
11	UCKMFD35	1 NON-ELECTRICAL MACHINERY	25.6	29.0	29.1	31.6	34.4	35.0	36.8	37.8	39.2	40.7	42.7
12	UCKMFD36	1 ELECTRICAL MACHINERY	25.2	27.5	27.5	29.9	32.4	33.0	34.4	35.7	37.1	38.4	40.4
13	UCKMFD37	1 MOTOR VEHICLES	29.8	33.5	33.4	36.3	39.3	40.4	42.3	44.1	45.9	47.7	50.2
14	UCKMFD37SP2	1 NON-AUTO TRANS EX. 1. ORD. + MISC.	30.8	41.0	41.3	44.8	48.5	50.1	52.6	54.9	57.2	59.7	62.8
15	UCKMFD38	1 INSTRUMENTS	25.0	28.4	28.3	30.8	33.5	34.1	35.5	36.8	38.2	39.6	41.6
16													
17		NON-DURABLE GOODS											
18													
19													
20	UCKMFD20	1 FOOD AND BEVERAGES	30.4	34.2	34.1	37.1	40.2	41.2	43.1	44.9	46.7	48.5	51.0
21	UCKMFD21	1 TOBACCO	30.3	33.0	33.9	36.0	39.0	40.9	42.7	44.5	46.3	48.0	50.5
22	UCKMFD22	1 TEXTILES	29.5	33.2	33.1	36.0	39.0	40.0	41.8	43.5	45.3	47.1	49.5
23	UCKMFD23	1 APPAREL	31.0	37.0	37.3	40.5	43.9	45.2	47.4	49.4	51.5	53.6	56.4
24	UCKMFD26	1 PAPER	23.9	27.2	27.0	29.3	31.9	32.5	33.8	35.1	36.4	37.7	39.6
25	UCKMFD27	1 PRINTING AND PUBLISHING	29.1	32.7	32.0	35.6	38.7	39.7	41.5	43.2	44.9	46.7	49.1
26	UCKMFD28	1 CHEMICALS	29.0	32.6	32.5	35.3	38.3	39.2	41.0	42.7	44.4	46.1	48.5
27	UCKMFD29	1 PETROLEUM	25.0	28.3	28.7	31.2	33.9	34.5	36.0	37.4	38.8	40.3	42.3
28	UCKMFD30	1 RUBBER	22.6	25.7	25.6	27.9	30.4	30.8	32.1	33.2	34.4	35.6	37.4
29	UCKMFD31	1 LEATHER	25.7	29.1	29.5	32.1	34.8	35.5	37.0	38.4	39.8	41.3	43.4
30													
31	UCKMFD31	1 TRANSPORTATION	30.2	33.9	34.3	37.3	40.5	41.5	43.3	45.1	46.8	48.6	51.1
32													
33	UCKMCH	1 COMMERCIAL	28.5	32.0	33.0	35.9	38.9	39.9	41.7	43.4	45.1	46.9	49.3
34													
35	UCKMCH49	1 UTILITIES	27.9	31.5	31.5	34.3	37.3	37.8	39.3	40.6	42.0	43.4	45.6
36	UCKMCH48	1 COMMUNICATIONS	30.8	34.6	34.8	37.0	41.1	41.9	43.6	45.2	46.9	48.6	51.0
37													
38													
39	UCKR	1 TOTAL RESIDENTIAL HOUSING UNITS	16.4	19.3	21.1	23.0	24.9	26.0	27.4	28.8	30.2	31.5	33.2
40													
41	UCKR50	1 OWNER OCCUPIED	16.7	19.9	21.7	23.7	25.8	26.9	28.4	29.9	31.3	32.8	34.4
42	UCKR51	1 LANDLORD OWNED	13.6	16.1	17.6	19.3	20.9	21.9	23.2	24.4	25.6	26.9	28.4
43	UCKR52	1 MOBILE HOMES	20.5	22.9	24.1	25.6	27.5	28.7	30.1	31.5	32.9	34.3	35.9

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TABLE 21.10 EMPLOYEE COMPENSATION (CURRENT \$)

LINE	VAR LABEL	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	WACFS	ALL INDUSTRIES	1299,311	1434,1	1556,4	1711,3	1875,9	2047,9	2227,1	2426,1	2636,0	2855,8	3083,2
2	WACAGS	AGRIC., FORESTRY AND FISHERIES	12,3	13,4	14,2	16,0	17,8	19,6	21,1	23,0	24,7	26,5	28,3
3	WACMGs	MINING	20,5	23,4	24,6	26,7	29,1	31,8	34,6	37,8	41,3	44,9	48,4
4	WACMFS	MANUFACTURING	365,8	408,8	446,4	487,6	533,0	577,8	622,0	673,9	726,8	777,4	826,7
5	WACMFDs	DURABLE GOODS	237,1	266,8	292,5	321,6	353,7	384,6	414,6	451,3	488,4	523,2	556,4
6	WACMFD24s	LUMBER	8,9	9,7	10,5	11,7	12,9	14,2	15,5	16,8	18,3	19,8	21,5
7	WACMFD25s	FURNITURE	6,4	7,2	7,9	8,6	9,3	10,3	11,1	12,1	13,0	14,0	14,9
8	WACMFD32s	STONE, CLAY AND GLASS	12,6	14,5	16,3	17,7	19,3	20,9	22,6	24,7	26,9	29,0	31,1
9	WACMFD33s	PRIMARY METALS	30,5	34,1	36,9	40,4	44,7	48,5	51,3	54,9	58,3	60,8	62,7
10	WACMFD34s	FABRICATED METAL PRODUCTS	27,4	30,9	34,3	38,0	42,2	46,1	49,9	54,5	59,2	63,6	67,7
11	WACMFD35s	NON-ELECTRICAL MACHINERY	45,9	50,9	56,3	62,2	68,9	75,4	81,7	89,8	98,1	105,6	112,6
12	WACMFD36s	ELECTRICAL MACHINERY	36,3	41,4	45,2	49,4	53,9	58,4	62,9	68,1	73,3	78,3	83,4
13	WACMFD37s	MOTOR VEHICLES	28,3	31,3	34,2	37,6	40,8	44,0	47,5	52,0	56,6	60,9	65,1
14	WACMFD37SP2s	NONAUTO TRANS. EQ. + MISC	30,5	35,0	38,0	41,8	46,0	50,0	53,9	58,7	63,6	68,3	73,0
15	WACMFD38s	INSTRUMENTS	10,1	11,7	12,8	14,1	15,4	16,8	18,1	19,7	21,3	22,8	24,4
16	WACMFS	NONDURABLE GOODS	128,7	142,1	153,9	166,0	179,3	193,1	207,4	222,7	238,4	254,2	270,3
17	WACMFS20s	FOOD AND BEVERAGES	28,8	30,9	32,7	34,4	36,3	38,1	40,0	42,0	44,2	46,6	49,2
18	WACMFS21s	TOBACCO	1,3	1,4	1,5	1,5	1,6	1,7	1,8	2,0	2,0	2,1	2,2
19	WACMFS22s	TEXTILES	10,8	11,6	12,6	14,1	15,5	17,0	18,5	20,1	21,8	23,5	25,1
20	WACMFS23s	APPAREL	12,8	14,4	15,5	16,8	18,2	19,8	21,3	22,8	24,4	26,0	27,5
21	WACMFS24s	PAPER	13,7	15,4	16,6	18,4	20,2	22,1	24,0	26,0	28,1	30,2	32,3
22	WACMFS25s	PRINTING AND PUBLISHING	18,2	20,7	22,9	25,1	27,5	30,0	32,7	35,5	38,5	41,5	44,7
23	WACMFS26s	CHEMICALS	23,8	26,1	28,1	29,8	31,7	33,8	36,2	38,6	41,2	43,7	46,2
24	WACMFS27s	PETROLEUM	5,6	6,3	6,9	7,3	8,0	8,5	9,0	9,5	9,9	10,3	10,7
25	WACMFS28s	RUBBER	11,0	12,2	13,4	14,9	16,3	17,9	19,4	21,2	23,0	24,8	26,5
26	WACMFS29s	LEATHER	2,7	3,0	3,4	3,7	4,0	4,3	4,6	4,9	5,2	5,5	5,8
27	WACMFS30s	TRANSPORTATION	55,8	60,6	65,5	71,0	77,6	84,9	92,4	100,7	110,1	120,3	130,2
28	WACMFS31s	UTILITIES	17,1	18,6	20,1	21,6	23,2	25,0	27,1	29,3	31,4	33,5	35,7
29	WACMFS32s	COMMUNICATIONS	29,5	32,1	34,7	39,5	42,3	46,0	49,7	54,4	59,9	65,6	71,3
30	WACMFS33s	COMMERCIAL AND OTHER	545,0	603,1	654,0	725,8	800,8	879,6	964,0	1055,0	1152,8	1258,3	1371,0
31	WACMFS34s	GOVERNMENT	253,5	274,2	296,7	323,1	352,1	383,2	416,3	452,0	489,1	529,2	571,6
32	WACMFS35s	FEDERAL	88,2	94,8	101,9	110,0	118,5	127,6	137,3	147,4	158,1	169,5	181,4
33	WACMFS36s	STATE AND LOCAL	165,2	179,4	194,8	213,2	233,6	255,6	279,0	304,6	331,0	359,7	390,1

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST., PHILA., PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 21.20 EMPLOYER COMPENSATION, GROWTH RATES

LINE	VAR LABEL	I T F M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	WHCS	I ALL INDUSTRIES	12.6	10.4	8.5	10.0	9.6	9.2	8.8	8.9	8.7	8.3	8.0
2													
3	WHCAGS	I AGRIC., FORESTRY AND FISHERIES	9.4	9.0	6.2	12.6	11.5	9.7	8.1	8.5	7.7	7.3	6.7
4													
5	WHCMGS	I MINING	18.2	14.1	6.2	7.6	9.0	9.2	8.6	9.3	9.2	8.9	7.7
6													
7	WHCMFS	I MANUFACTURING	13.3	11.8	9.2	9.2	9.3	8.4	7.7	8.4	7.8	7.0	6.3
8													
9	WHCMFS	I DURABLE GOODS	14.9	12.5	9.6	9.9	10.0	8.8	7.8	8.9	8.2	7.1	6.3
10													
11	WHCMFD243	I LUMBER	10.8	9.0	8.1	10.6	10.7	9.9	9.1	8.5	8.6	8.6	8.3
12	WHCMFD253	I FURNITURE	12.9	12.6	10.0	8.9	9.8	8.4	8.0	9.1	7.1	7.6	6.8
13	WHCMFD123	I STONE, CLAY AND GLASS	15.9	15.2	12.0	8.7	9.0	8.5	7.9	9.3	9.1	7.9	7.0
14	WHCMFD133	I PRIMARY METALS	12.8	11.8	8.4	9.4	10.6	8.5	5.8	7.1	6.1	4.4	3.0
15	WHCMFD143	I FABRICATED METAL PRODUCTS	15.7	12.6	11.2	10.4	10.9	9.3	8.2	9.3	8.6	7.4	6.5
16	WHCMFD153	I NONELECTRICAL MACHINERY	17.1	10.9	10.6	10.6	10.7	9.4	8.3	9.8	9.2	7.7	6.4
17	WHCMFD163	I ELECTRICAL MACHINERY	16.0	14.2	9.0	9.3	9.2	8.3	7.7	8.2	7.7	6.8	6.5
18	WHCMFD1718	I MOTOR VEHICLES	13.0	10.5	9.2	10.0	8.4	7.8	8.1	9.5	8.8	7.6	6.9
19	WHCMFD179P28	I NONAUTO TRANSP. EX. ORD. + MISC	15.0	14.9	8.3	10.1	10.0	8.7	7.9	8.8	8.1	7.4	6.9
20	WHCMFD183	I INSTRUMENTS	14.2	13.8	9.7	9.7	9.7	8.7	7.9	8.6	8.1	7.4	6.4
21													
22	WHCMFNS	I NONDURABLE GOODS	10.6	10.4	8.4	7.9	8.0	7.7	7.4	7.3	7.1	6.6	6.4
23													
24	WHCMFN205	I FOOD AND BEVERAGES	13.5	7.2	5.8	5.4	5.4	5.1	4.9	5.1	5.2	5.3	5.7
25	WHCMFN213	I TOBACCO	10.5	7.6	6.2	6.3	6.4	6.1	5.7	5.7	4.8	4.3	4.3
26	WHCMFN223	I TEXTILES	8.0	8.0	8.7	9.7	10.1	9.6	9.0	8.9	8.4	7.7	6.7
27	WHCMFN233	I APPAREL	10.8	11.8	8.3	8.0	8.5	8.4	7.7	7.4	6.9	6.3	5.8
28	WHCMFN243	I PAPER	11.9	12.5	9.3	9.2	9.7	9.5	8.7	8.5	8.0	7.3	7.1
29	WHCMFN273	I PRINTING AND PUBLISHING	11.4	13.7	10.5	9.8	9.3	9.3	8.9	8.7	8.4	7.9	7.7
30	WHCMFN283	I CHEMICALS	8.7	9.6	7.7	6.2	6.6	6.5	6.9	6.8	6.5	6.1	5.7
31	WHCMFN293	I PETROLEUM	8.8	12.3	9.5	7.9	7.2	6.5	5.7	5.2	4.6	4.2	4.0
32	WHCMFN303	I RUBBER	6.4	11.2	10.1	10.1	10.3	9.5	8.7	9.0	8.5	7.8	7.2
33	WHCMFN313	I LEATHER	12.5	12.6	12.0	8.8	8.3	7.6	6.9	6.7	6.5	6.1	6.0
34													
35	WHCMRGTS	I TRANSPORTATION	10.2	8.6	8.1	8.4	9.3	9.4	8.8	9.0	9.3	9.3	8.2
36													
37	WHCMRGU493	I UTILITIES	12.0	8.6	8.1	7.4	7.5	8.0	8.1	8.3	7.1	6.8	6.4
38													
39	WHCMRGU483	I COMMUNICATIONS	16.4	8.7	8.2	13.8	7.2	8.7	8.1	9.3	10.2	9.6	8.6
40													
41	WHCMCCS	I COMMERCIAL AND OTHER	14.0	10.6	8.4	11.0	10.3	9.8	9.4	9.4	9.3	9.2	9.0
42													
43	WHCMGV3	I GOVERNMENT	8.9	8.2	8.2	8.9	9.0	8.8	8.6	8.6	8.2	8.2	8.0
44													
45	WHCMGV3	I FEDERAL	8.7	7.4	7.5	7.9	7.8	7.7	7.6	7.4	7.3	7.2	7.0
46	WHCMGV3	I STATE AND LOCAL	9.0	8.6	8.6	9.4	9.6	9.4	9.2	9.2	8.7	8.6	8.5

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TABLE 22.10 WAGE RATES (CURRENT \$)

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	WRCG1	I ALL INDUSTRIES (PER WEEK)	265.10	286.14	306.24	330.18	355.71	382.57	410.51	440.60	471.51	503.41	536.65
2	WRCAG3	B FARM (PER WEEK)	71.21	81.22	89.06	99.90	110.25	120.05	129.80	141.18	152.57	164.53	176.80
3	WRCMG3	B MINING (PER HOUR)	10.55	11.86	12.89	14.01	15.23	16.56	17.97	19.44	20.95	22.53	24.13
4		DURABLE GOODS (PER HOUR)											
5	WRCMFD248	B LUMBER	6.46	7.00	7.59	8.26	8.96	9.69	10.45	11.23	12.02	12.83	13.69
6	WRCMFD258	B FURNITURE	5.88	6.39	6.89	7.49	8.09	8.71	9.34	9.99	10.64	11.31	12.02
7	WRCMFD328	B STONE, CLAY AND GLASS	0.42	0.48	0.54	0.61	0.68	0.75	0.82	0.89	0.96	1.03	1.10
8	WRCMFD338	B PRIMARY METALS	11.37	12.44	13.49	14.61	15.77	16.95	18.12	19.30	20.46	21.62	22.84
9	WRCMFD348	B FABRICATED METAL PRODUCT	8.44	9.29	10.23	11.18	12.15	13.16	14.21	15.30	16.41	17.53	18.74
10	WRCMFD358	B NONELECTRICAL MACHINERY	9.26	10.08	10.96	11.92	12.89	13.89	14.93	16.02	17.12	18.25	19.40
11	WRCMFD368	B ELECTRICAL MACHINERY	8.46	9.26	10.10	11.03	11.96	12.92	13.92	14.96	16.02	17.10	18.24
12	WRCMFD378	B MOTOR VEHICLES	13.39	14.58	15.96	17.42	18.98	20.24	21.94	23.84	25.86	27.97	30.29
13	WRCMFD388	B NONAUTO TRANS. EQ + MISC	9.28	10.20	11.11	12.09	13.11	14.17	15.27	16.40	17.55	18.71	19.99
14	WRCMFD398	B INSTRUMENTS	8.86	9.63	10.45	11.33	12.22	13.13	14.06	15.01	15.98	16.95	17.98
15		NONDURABLE GOODS (PER HOUR)											
16	WRCMFD208	B FOOD AND BEVERAGES	7.94	8.67	9.35	10.07	10.83	11.63	12.44	13.27	14.10	14.94	15.84
17	WRCMFD218	B TOBACCO	9.14	9.96	10.74	11.59	12.47	13.38	14.29	15.20	16.10	16.99	17.96
18	WRCMFD228	B TEXTILES	5.10	5.40	5.70	6.01	6.29	6.59	6.89	7.19	7.49	7.79	8.09
19	WRCMFD238	B APPAREL	5.19	5.69	6.19	6.91	7.50	8.16	8.83	9.57	10.32	11.08	11.88
20	WRCMFD248	B PAPER	8.11	8.65	9.16	9.73	10.22	10.74	11.32	11.85	12.42	12.97	13.55
21	WRCMFD258	B PRINTING AND PUBLISHING	6.19	6.63	7.06	7.53	8.03	8.55	9.08	9.61	10.14	10.68	11.24
22	WRCMFD268	B CHEMICALS	10.25	11.14	12.00	12.92	13.87	14.85	15.85	16.87	17.89	18.93	20.00
23	WRCMFD278	B PETROLEUM	12.09	13.24	14.36	15.62	16.91	18.23	19.57	20.92	22.28	23.65	25.11
24	WRCMFD288	B RUBBER	7.51	8.10	8.66	9.29	9.91	10.58	11.24	11.94	12.67	13.47	14.30
25	WRCMFD298	B LEATHER	5.13	5.65	6.16	6.68	7.24	7.83	8.48	9.14	9.82	10.51	11.24
26	WRCMG18	B TRANSPORTATION (PER WEEK)	398.52	424.81	458.59	494.94	534.84	578.96	625.40	673.26	722.26	773.03	827.38
27	WRCMGU493	B UTILITIES (PER WEEK)	427.91	458.03	498.57	539.55	583.51	631.38	682.24	733.75	791.44	849.46	911.92
28	WRCMG488	B COMMUNICATIONS (PER WEEK)	453.76	489.00	530.54	577.26	626.05	679.40	735.41	792.68	851.57	914.07	980.62
29	WRCMG18	B COMMERCIAL AND OTHER (PER WEEK)	211.75	227.69	242.51	261.18	281.29	302.68	325.38	349.46	374.61	401.21	429.29
30	WRCGV3	I GOVERNMENT (PER WEEK)	274.95	292.87	310.27	334.82	360.35	387.25	414.75	444.03	473.90	505.48	538.57
31	WRCGVFS	B FEDERAL	348.21	375.56	404.84	436.37	469.58	504.77	542.00	580.78	621.50	664.73	709.60
32	WRCGV3S	B STATE & LOCAL	287.15	312.62	334.74	362.48	392.31	424.32	458.61	495.62	534.63	574.49	614.29

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TABLE 22.20 WAGE RATES, % CHANGE

LINE	VAR LABEL	1970	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	WHCS	8.21	7.9	7.0	7.8	7.7	7.5	7.3	7.3	7.0	6.8	6.6
2												
3	WHCAGS	7.21	14.0	9.7	12.2	10.4	8.9	8.1	8.8	8.1	7.8	7.5
4												
5	WHCMGS	15.81	12.5	8.6	6.7	8.7	8.7	8.5	8.2	7.7	7.5	7.1
6												
7												
8	DURABLE GOODS (PER HOUR)											
9	WHCMFD243	7.31	8.5	8.3	8.9	8.5	8.1	7.8	7.5	7.0	6.8	6.7
10	WHCMFD253	6.61	6.7	7.9	8.6	8.1	7.7	7.2	6.9	6.5	6.3	6.3
11	WHCMFD323	8.71	10.3	9.0	8.8	8.6	8.4	8.0	7.9	7.2	6.7	6.8
12	WHCMFD333	7.91	9.5	8.4	8.3	8.0	7.5	6.9	6.5	6.0	5.7	5.7
13	WHCMFD143	10.01	10.1	10.1	9.3	8.7	8.3	8.0	7.7	7.2	6.8	6.9
14	WHCMFD353	11.91	8.9	8.7	8.8	8.1	7.8	7.5	7.3	6.9	6.4	6.8
15	WHCMFD363	9.41	9.4	9.1	9.2	8.4	8.0	7.0	7.5	7.1	6.7	6.9
16	WHCMFD3713	9.51	8.9	9.4	9.1	7.8	7.8	8.4	8.7	8.5	8.2	8.3
17	WHCMFD37SP23	8.11	9.9	9.0	8.8	8.4	8.1	7.8	7.4	7.0	6.6	6.8
18	WHCMFD383	8.91	8.8	8.5	8.4	7.8	7.5	7.1	6.8	6.4	6.1	6.1
19												
20												
21	NONDURABLE GOODS (PER HOUR)											
22	WHCMFN203	11.91	8.9	7.9	7.8	7.5	7.3	7.0	6.7	6.3	6.0	6.0
23	WHCMFN213	10.31	9.0	7.8	7.9	7.6	7.3	6.8	6.4	5.9	5.6	5.7
24	WHCMFN223	7.81	9.5	9.8	9.5	9.2	8.8	8.6	8.2	7.7	7.3	7.1
25	WHCMFN233	9.41	10.1	8.6	8.1	8.6	8.7	8.5	8.2	7.8	7.4	7.1
26	WHCMFN263	10.81	10.7	8.4	7.9	8.3	8.4	8.2	7.9	7.5	7.0	7.2
27	WHCMFN273	9.31	10.3	9.2	8.8	8.3	8.0	7.6	7.1	6.6	6.2	6.2
28	WHCMFN283	7.41	8.9	7.5	7.7	7.3	7.1	6.7	6.4	6.1	5.8	5.7
29	WHCMFN293	9.31	9.5	8.4	8.8	8.3	7.8	7.3	6.9	6.5	6.2	6.2
30	WHCMFN303	4.91	8.9	8.3	8.2	7.7	7.3	7.1	6.8	6.4	6.1	6.2
31	WHCMFN313	9.41	10.2	9.0	8.5	8.5	8.4	8.1	7.8	7.4	7.0	7.0
32												
33	WHCRGT3	9.71	6.6	7.9	7.8	8.2	8.2	8.0	7.7	7.3	7.0	7.0
34												
35	WHCRGU493	8.61	7.0	8.9	8.2	8.1	8.2	8.1	7.8	7.6	7.3	7.4
36												
37	WHCRGU403	8.71	7.8	8.5	8.8	8.6	8.4	8.2	7.8	7.4	7.3	7.3
38												
39	WHCCGS	8.51	7.5	6.5	7.7	7.7	7.6	7.5	7.4	7.2	7.1	7.0
40												
41	WHCGV3	6.41	6.5	5.9	7.9	7.6	7.5	7.1	7.1	6.7	6.7	6.5
42												
43	WHCGVFS	8.91	7.8	7.8	7.8	7.6	7.5	7.4	7.2	7.0	7.0	6.8
44	WHCGVS3	5.71	6.1	5.4	8.1	7.8	7.6	7.2	7.2	6.8	6.7	6.6

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TABLE 23.10 PRICE DEFATORS (1972 = 100)

LINE	VAR LABEL	I	T	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	PGGPP	1	GROSS NATIONAL PRODUCT			152.11	162.9	171.2	185.2	197.7	210.4	223.1	236.0	248.7	261.4	274.1
2																
3	PDVYN	8	NATIONAL INCOME			152.11	162.9	173.2	185.3	197.7	210.5	223.2	236.2	249.0	261.7	274.5
4																
5	PDCE	1	PERSONAL CONSUMPTION			150.41	160.9	171.4	183.0	194.9	206.9	218.9	230.7	242.4	254.1	265.6
6	PDCEA	1	DURABLE GOODS			136.71	148.9	152.7	161.6	169.6	177.6	185.4	193.0	200.5	208.1	215.7
7	PDCEDA	1	AUTOS AND PARTS			146.01	158.3	170.0	180.0	188.4	197.7	207.8	216.8	226.5	236.9	247.0
8	PDCEDAVN	8	NEW CARS			138.91	148.6	157.3	167.3	174.3	181.6	189.2	196.8	203.7	211.4	219.8
9	PDCEDAVU	8	USED CARS			191.01	216.7	241.9	257.6	269.2	282.6	297.5	314.1	332.1	352.2	371.0
10	PDCEDAVY	8	RECREATIONAL VEH. AND TRUCKS			138.01	149.3	159.6	170.5	181.9	193.7	205.9	217.6	229.4	241.7	254.2
11	PDCEDAV	8	TIRES, TUBES AND PARTS			132.91	143.9	153.3	164.4	174.5	184.6	194.9	205.2	215.0	224.9	234.9
12	PDCEDF	8	FURNITURE AND HOUSEHOLD EQUIPMENT			120.61	134.7	140.0	147.8	155.1	162.2	168.9	175.3	181.2	187.1	192.8
13	PDCEDF	8	OTHER DURABLE GOODS			132.01	139.1	145.1	153.4	161.5	169.4	177.1	184.3	190.9	197.5	203.8
14	PDCEDF	1	NONDURABLE GOODS			155.01	165.0	174.5	184.9	195.8	206.9	217.8	228.9	239.5	250.0	260.1
15	PDCEDF	8	FOOD AND BEVERAGES			162.91	175.9	188.2	198.5	210.0	222.0	234.1	246.8	259.2	271.2	282.7
16	PDCEDF	8	CLOTHING AND SHOES			120.61	130.3	134.7	141.8	149.0	156.1	162.9	169.2	175.2	181.0	186.4
17	PDCEDF	8	GASOLINE AND OIL			180.61	192.7	205.1	221.3	237.8	254.6	271.3	288.3	305.1	321.9	339.1
18	PDCEDF	8	OTHER NONDURABLE GOODS			155.31	164.5	173.6	185.3	197.2	209.2	221.2	232.8	244.1	255.5	266.8
19	PDCESH	8	SERVICES			141.31	153.0	165.2	178.1	191.0	203.8	216.3	228.7	240.5	252.2	263.6
20	PDCESH	8	HOUSING			141.31	153.0	165.2	178.1	191.0	203.8	216.3	228.7	240.5	252.2	263.6
21	PDCESH	8	HOUSEHOLD OPERATION SERVICES			141.31	153.0	165.2	178.1	191.0	203.8	216.3	228.7	240.5	252.2	263.6
22	PDCEST	8	TRANSPORTATION SERVICES			154.41	165.6	177.3	190.7	204.9	219.6	234.6	249.5	264.5	280.1	295.9
23	PDCEST	8	OTHER SERVICES			157.21	169.3	181.6	196.9	212.9	229.4	245.9	262.7	279.4	296.6	313.9
24																
25	POIRF	1	FIXED INVESTMENT			164.71	170.9	182.4	200.2	224.4	240.3	256.2	272.7	288.7	304.4	320.1
26																
27	POIRFN	8	NONRESIDENTIAL			150.01	171.2	182.7	196.9	211.2	225.6	240.7	255.4	270.0	285.1	300.8
28	POIRFN	8	RESIDENTIAL			178.61	200.5	221.3	240.7	259.9	279.8	299.9	318.9	338.0	357.9	378.3
29	POIRFN	1	NONFARM			179.41	201.1	221.8	243.2	262.6	283.0	303.6	322.8	342.2	362.5	383.0
30	POIRFN	1	FARM			179.41	201.1	221.8	243.2	262.6	283.0	303.6	322.8	342.2	362.5	383.0
31	POIRFN	8	IMPLICIT DEFATOR, MOB. HOMES			150.21	170.3	180.6	191.4	204.6	218.1	231.5	244.7	257.6	270.6	283.5
32																
33			AVERAGE VALUE OF HOUSING STARTS													
34			(UNIT = \$10,000)													
35	PUNSPRS1	8	SINGLES			4,5981	5,033	5,314	5,799	6,314	6,838	7,427	8,043	8,630	9,260	9,890
36	PUNSPRS1	8	MULTIPLES			2,5201	2,703	2,897	3,071	3,262	3,502	3,766	4,011	4,277	4,636	5,008
37	PUNSPRS1	8	MOBILE HOMES			1,6791	1,825	1,990	2,126	2,254	2,382	2,480	2,596	2,742	2,981	3,088
38																
39	PTER	1	EXPORTS			190.41	201.9	212.2	225.5	239.3	251.8	268.2	282.6	296.6	310.5	324.4
40	PTHR	1	IMPORTS			219.41	236.9	258.6	271.1	287.5	302.6	315.1	328.2	340.9	354.1	367.7
41																
42	PDGVP1	1	GOVERNMENT PURCH OF GOODS & SERV			157.61	168.3	178.5	190.7	203.2	216.1	229.3	242.8	256.4	270.6	285.6
43	PDGVP1	8	FEDERAL			153.21	163.0	172.8	184.7	196.8	208.9	221.1	233.2	245.3	257.8	270.4
44	PDGVP3	8	STATE AND LOCAL			160.21	171.3	181.9	194.1	206.9	220.2	231.9	248.1	262.5	277.7	293.8
45																
46			RETAIL UNIT PRICES, GASOLINE													
47	PIRG	1	REG. GRADE GASOLINE, INCL. TAXES			65.31	69.7	74.2	80.0	85.9	92.0	98.0	104.0	109.9	115.8	121.6
48	PIRG13	1	STATE AND LOCAL TAXES			8.61	8.8	9.0	9.2	9.4	9.5	9.7	9.9	10.1	10.3	10.5
49	PIRG1F	1	FEDERAL TAXES			4.01	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
50	PURCF	8	REG. GRADE GASOLINE, EXCL. TAXES			52.71	56.9	61.2	66.8	72.6	78.4	84.2	90.0	95.8	101.5	107.3

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TABLE 23.20 PRICE DEFLATORS, GROWTH RATES

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 PDGNDP	7.41	7.1	6.3	6.9	6.7	6.4	6.0	5.8	5.4	5.1	4.8
2											
3 PDYN	6.91	7.1	6.3	6.9	6.7	6.4	6.1	5.8	5.4	5.1	4.9
4											
5 PDCE	6.91	7.0	6.5	6.8	6.5	6.2	5.8	5.4	5.0	4.8	4.6
6 PDCEDA	5.51	6.0	5.4	5.8	5.0	4.7	4.4	4.1	3.9	3.8	3.6
7 PDCEDA	7.51	7.4	7.4	5.9	4.7	4.2	4.2	4.3	4.5	4.6	4.6
8 PDCEDAVN	8.01	8.0	6.0	6.3	4.1	4.2	4.2	3.8	3.7	3.8	3.8
9 PDCEDAVN	6.31	11.8	11.6	6.3	4.5	3.0	5.3	5.6	5.7	6.0	5.3
10 PDCEDAVN+T	8.01	7.6	7.7	6.9	6.7	6.3	6.1	5.7	5.4	5.3	5.2
11 PDCEDAVN+T	6.81	8.3	7.3	6.6	6.1	5.8	5.6	5.2	4.8	4.6	4.5
12 PDCEDAVN+T	3.91	4.7	3.9	5.6	5.0	4.5	4.1	3.8	3.4	3.3	3.0
13 PDCEDAVN+T	4.61	4.8	4.3	5.7	5.3	4.9	4.5	4.0	3.6	3.4	3.2
14 PDCEDAVN+T	6.91	6.4	5.8	5.9	5.9	5.6	5.3	5.1	4.7	4.4	4.0
15 PDCEDAVN+T	9.71	7.9	7.0	5.5	5.8	5.7	5.5	5.4	5.0	4.6	4.2
16 PDCEDAVN+T	3.01	3.5	3.4	5.3	5.1	4.7	4.4	3.9	3.5	3.3	3.0
17 PDCEDAVN+T	3.61	6.7	6.4	7.9	7.5	7.1	6.8	6.2	5.8	5.5	5.3
18 PDCEDAVN+T	5.61	5.9	5.5	6.8	6.4	6.1	5.7	5.3	4.9	4.7	4.4
19 PDCEDAVN+T	7.31	7.7	7.5	7.8	7.4	7.0	6.5	6.1	5.7	5.4	5.1
20 PDCEDAVN+T	7.51	8.3	8.1	7.6	7.2	6.7	6.1	5.7	5.2	4.9	4.5
21 PDCEDAVN+T	6.91	6.9	6.6	7.3	7.6	7.2	6.8	6.3	6.0	5.9	5.6
22 PDCEDAVN+T	7.71	7.2	7.1	7.6	7.4	7.2	6.8	6.3	6.0	5.9	5.6
23 PDCEDAVN+T	7.31	7.7	7.3	8.4	8.2	7.7	7.2	6.8	6.4	6.1	5.8
24											
25 PDIF	9.41	8.6	7.8	8.2	7.8	7.1	6.6	6.4	5.9	5.4	5.2
26											
27 PDIFBN	8.21	7.8	6.7	7.8	7.3	6.9	6.6	6.1	5.7	5.6	5.5
28 PDIFBN	12.11	12.3	10.4	8.7	8.0	7.7	7.2	6.3	6.0	5.9	5.7
29 PDIFBN	12.31	12.5	10.6	8.8	8.0	7.8	7.3	6.3	6.0	6.0	5.9
30 PDIFBN	12.31	12.1	10.3	5.8	5.6	5.2	5.0	4.8	4.6	4.4	4.5
31 PDIFBNH	8.01	7.0	6.0	6.0	6.9	6.6	6.1	5.7	5.3	5.0	4.7
32											
33											
34 PDIFBNH	20.61	9.6	6.0	8.7	8.9	8.3	8.6	8.3	7.3	7.1	6.8
35 PDIFBNH	29.01	7.3	7.2	6.0	6.2	7.3	7.5	6.5	6.6	6.4	6.8
36 PDIFBNH	15.21	8.7	9.0	6.8	6.0	5.7	4.1	4.7	7.6	6.8	3.6
37											
38 PDIFBNH	6.71	5.9	5.1	6.2	6.1	6.1	5.7	5.4	5.0	4.7	4.5
39 PDIFBNH	4.31	7.9	7.5	6.5	6.0	5.3	4.1	4.2	1.9	1.9	3.8
40											
41 PDIFBNH	7.81	6.7	6.1	6.8	6.6	6.4	6.1	5.9	5.6	5.6	5.5
42 PDIFBNH	7.31	6.4	6.0	6.9	6.5	6.2	5.8	5.5	5.2	5.1	4.9
43 PDIFBNH	7.91	6.9	6.2	6.7	6.6	6.5	6.2	6.1	5.8	5.8	5.8
44											
45											
46 PDIFBNH	3.61	6.7	6.4	7.8	7.4	7.0	6.5	6.1	5.7	5.4	5.2
47 PDIFBNH	2.71	2.3	2.3	2.0	1.9	1.9	1.9	2.1	2.0	2.0	1.9
48 PDIFBNH	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 PDIFBNH	4.01	7.9	7.5	9.2	8.6	8.1	7.4	6.9	6.3	6.0	5.8

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TABLE 25.00 GROSS NATIONAL PRODUCT, NATIONAL INCOME, PERSONAL INCOME

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 GNP	2105.7	2130.1	2492.2	2754.9	3044.6	3335.5	3628.3	3975.3	4328.6	4682.0	5011.5
2 LESS: CAPITAL CONS ALLOWANCE	217.1	242.2	265.7	293.4	323.5	355.5	389.4	425.5	463.9	504.9	548.2
3 EQUALS: NET NATIONAL PRODUCT	1888.6	1887.9	2226.5	2461.4	2721.1	2980.0	3238.9	3549.8	3864.7	4177.9	4463.3
4 LESS: INDIRECT BUSINESS TAXES	177.9	188.3	201.3	214.4	234.0	256.6	280.5	303.9	326.1	350.0	368.7
5 FEDERAL	27.0	29.0	29.6	28.7	31.0	34.0	37.7	41.3	44.9	48.5	45.1
6 STATE AND LOCAL	150.1	159.3	171.7	185.7	202.2	221.8	242.7	262.6	281.2	301.5	323.6
7 BUSINESS TRANSFER PAYMENTS	10.7	11.0	13.0	13.8	14.6	15.4	16.2	17.0	17.8	18.6	19.4
8 STATISTICAL DISCREPANCY	2.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
9 PLUS: SUBSIDIES LESS CURR SURP	3.9	3.5	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
10 EQUALS: NATIONAL INCOME	1701.8	1866.2	2212.7	2335.0	2474.3	2709.0	2943.9	3230.6	3522.5	3811.0	4096.7
11 LESS: CORP. PROFITS & INV. VAL ADJ	161.5	170.3	179.9	214.6	240.7	275.1	293.6	335.9	374.7	404.0	427.5
12 CONTRIBUTIONS FOR SOC. INS.	164.0	169.7	201.9	220.0	243.4	267.3	292.3	320.7	350.0	382.6	415.7
13 PERS. CONTRIB. FOR SOC. INS.	69.4	77.2	85.0	93.7	102.9	112.6	123.5	135.0	147.3	160.0	160.0
14 EMPL. CONTRIB. FOR SOC. INS.	94.5	111.5	124.2	135.0	149.7	164.4	179.9	197.2	215.7	235.3	255.6
15 WAGE ACCRUALS LESS DISBURSE.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16 PLUS: TRANSFER PAYMENTS	226.7	258.5	288.2	317.5	349.8	385.0	422.1	460.5	500.4	543.1	588.3
17 FED. TRANSFERS TO PERSONS	182.3	209.3	231.6	255.0	281.2	309.9	340.3	371.0	404.6	439.9	477.5
18 SUPPL UNEMPL INS BENEFITS	9.2	9.8	11.7	11.8	12.1	13.1	14.1	14.5	14.6	15.1	15.9
19 OTHER TRANSFER PAYMENTS	173.1	199.5	219.9	243.2	269.0	296.0	326.2	357.3	390.0	424.0	461.6
20 STATE TRANSFER PAYMENTS	33.7	38.4	43.6	48.7	54.0	59.7	65.6	71.7	78.0	84.5	91.4
21 BUSINESS TRANSFER PAYMENTS	10.7	11.0	13.0	13.8	14.6	15.4	16.2	17.0	17.8	18.6	19.4
22 INTEREST PAID BY GOV. & CONS.	92.9	63.2	70.6	75.0	80.3	84.4	88.3	91.8	95.2	97.9	100.6
23 NET INTEREST PD BY CONSUMERS	33.7	38.4	43.6	48.7	54.0	59.7	65.6	71.7	78.0	84.5	91.4
24 NET INTEREST PAID (FEDERAL)	35.5	41.3	44.8	47.0	48.5	49.6	50.5	51.0	51.4	51.1	50.8
25 NET INTEREST PAID (STATE)	7.7	6.3	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7
26 DIVIDENDS	49.3	56.1	63.0	70.5	78.6	86.9	95.1	104.2	113.6	123.6	133.6
27 EQUALS: PERSONAL INCOME	1705.2	1881.0	2052.8	2263.4	2490.9	2723.6	2963.4	3230.5	3506.4	3789.1	4076.1

A PRODUCT OF WHARTON CPA, INC., 1624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

TABLE 26.00 NATIONAL INCOME (CURRENT \$)

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	YNS	1701.8	1866.2	2012.7	2235.0	2474.3	2709.8	2943.9	3230.6	3522.5	3811.0	4096.7
2	WRC3	1299.3	1434.1	1556.4	1711.3	1875.9	2047.9	2227.1	2426.1	2636.0	2855.8	3083.2
3	YENTFS	24.3	20.1	30.7	32.7	34.7	36.7	38.7	40.7	42.7	44.7	47.1
4	YOTHS	239.2	257.8	272.3	305.6	346.4	383.7	420.3	466.1	509.2	548.9	583.4
5	CCAAYRENTS	-20.9	-23.1	-25.1	-27.1	-29.1	-31.1	-33.1	-35.1	-37.1	-39.1	-41.1
6	YVARS	-1.9	-1.3	-1.7	-2.4	-2.6	-2.9	-3.0	-3.3	-3.4	-3.6	-3.8
7	CCAAYRENTS	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
8	YVARS	161.5	170.3	179.9	214.6	248.7	275.1	293.6	335.9	374.7	404.0	427.5
9	CCAAYRENTS	-23.0	-20.8	-19.6	-26.1	-28.4	-30.8	-32.2	-34.8	-35.6	-37.6	-39.5
10	YVARS	-16.1	-21.4	-24.1	-25.1	-26.1	-27.1	-28.1	-29.1	-30.1	-31.1	-32.1
11	YVARS	202.6	212.1	223.6	265.8	303.2	333.0	351.9	399.6	440.4	472.7	499.2
12	YVARS	83.1	88.9	91.1	98.5	114.4	126.7	135.8	154.9	172.4	186.9	198.3
13	YVARS	110.9	120.8	142.5	167.3	188.8	206.3	218.2	244.9	268.0	285.8	300.9
14	YVARS	49.3	56.1	63.0	70.5	78.6	86.9	95.1	104.2	113.8	123.6	133.6
15	YVARS	69.6	73.2	79.5	96.8	110.2	119.5	123.0	140.7	154.2	162.2	167.2

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

TABLE 27.00 PERSONAL INCOME (CURRENT \$)

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 PERSONAL INCOME	1705.2	1881.0	2052.8	2263.4	2490.9	2723.6	2963.4	3230.5	3506.4	3789.1	4076.1
1 YPS	1299.1	1434.1	1556.4	1711.3	1875.9	2047.9	2227.1	2426.1	2636.0	2855.8	3083.2
2 WRC3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3 WRC3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 WALDS	239.2	257.8	272.3	305.6	346.4	383.7	420.3	466.1	509.2	548.9	583.4
5 YDTHS	-1.9	-1.3	-1.7	-2.4	-2.6	-2.9	-3.0	-3.3	-3.4	-3.6	-3.8
6 IVANS	24.3	28.1	30.7	32.7	34.7	36.7	38.7	40.7	42.7	44.7	47.1
7 YENTFS	49.3	56.1	63.0	70.5	78.6	86.9	95.1	104.2	113.8	123.6	133.6
8 YDIVTS	52.9	63.1	70.6	75.7	80.2	84.3	88.2	91.7	95.1	97.8	100.5
9 YINTGS	31.7	35.3	42.3	45.3	48.3	51.3	54.3	57.3	60.3	63.3	66.3
10 YINTGS	-7.7	-9.3	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7
11 YINTGS	35.5	41.3	44.8	47.0	48.5	49.6	50.9	51.0	51.4	51.1	50.8
12 TRTPS	226.7	254.5	286.2	317.5	349.8	383.0	422.1	460.5	500.4	543.1	588.3
13 TRHUS	10.7	11.8	13.0	13.8	14.6	15.4	16.2	17.0	17.8	18.6	19.4
14 TRGFS	182.3	208.3	231.6	255.0	281.2	309.9	340.3	371.8	404.6	439.9	477.5
15 TRDPS	9.2	9.8	11.7	11.8	12.1	13.1	14.1	14.9	15.6	15.1	15.9
16 TRGFS	173.1	194.5	219.9	243.2	269.0	296.0	326.2	357.3	390.0	424.8	461.6
17 TRGFS	33.7	38.4	43.6	48.7	54.0	59.7	65.6	71.7	78.0	84.5	91.4
18 TRGFS	164.0	186.7	201.9	220.8	243.4	267.3	292.5	320.7	350.8	382.6	415.7
19 TRGFS	94.3	111.5	124.2	135.8	149.7	164.4	179.9	197.2	215.7	235.3	255.6
20 TRGFS	69.4	77.2	77.7	85.0	93.7	102.9	112.6	123.5	135.0	147.3	160.0
21 TRGFS	255.2	279.5	303.0	343.4	385.1	427.6	471.8	518.2	567.1	618.0	673.3
22 TRGFS	1450.1	1601.5	1749.8	1920.0	2105.7	2296.0	2491.6	2712.3	2959.3	3171.1	3402.8
23 TRGFS	1371.2	1504.8	1635.6	1798.5	1970.1	2148.7	2332.8	2535.7	2745.3	2963.0	3182.1
24 TRGFS	1336.5	1465.4	1592.2	1752.1	1920.7	2096.3	2277.5	2477.3	2683.9	2898.7	3114.7
25 TRGFS	33.7	38.4	42.3	45.3	48.3	51.3	54.3	57.3	60.3	63.3	66.3
26 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
27 TRGFS	78.8	96.7	114.2	121.5	135.7	147.3	158.7	176.6	194.0	208.1	220.7
28 TRGFS	5.4	6.0	6.5	6.3	6.4	6.4	6.4	6.5	6.6	6.6	6.5
29 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
30 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
31 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
32 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
33 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
34 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
35 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
36 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
37 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
38 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
39 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
40 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
41 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
42 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
43 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
44 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
45 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
46 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
47 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
48 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
49 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
50 TRGFS	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
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TABLE 2A.00 SOURCES AND USES OF GROSS SAVINGS

LINE VAN LABEL	I T E M	1976	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 SVGS	GROSS PRIVATE SAVING-----	320.51	352.6	374.4	428.9	497.1	555.6	606.2	688.5	767.5	833.5	886.7
2												
3 YPOSAVA	PERSONAL SAVING-----	70.81	96.7	114.2	121.5	135.7	147.3	159.7	176.6	194.0	208.1	220.7
4 RETS	INDISTRIBUTED CORPORATE PROFITS--	69.61	73.2	79.5	96.8	110.2	119.5	123.0	140.7	154.2	162.2	167.2
5 IVACS	CORPORATE INVENTORY VALUATION ADJ--	-23.01	-20.4	-19.6	-26.1	-20.4	-30.8	-32.2	-34.0	-35.6	-37.6	-39.5
6 CCAACPS	CCA ADJUSTMENT, CORP. PROFITS-----	-18.11	-21.4	-24.1	-25.1	-26.1	-27.1	-28.1	-29.1	-30.1	-31.1	-32.1
7 CCATS	CAPITAL CONSUMPTION ALLOWANCES-----	217.11	242.2	265.7	293.4	323.5	355.5	389.4	425.5	463.9	504.9	548.2
8 WALDS	WAGE ACCRUALS LESS DISBURSEMENTS--	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9												
10 GVSURPS	GOVT SURPLUS OR DEFICIT (-)-----	-3.91	-17.6	-41.3	-31.7	-17.7	-6.7	-4.7	9.7	21.1	27.0	22.2
11 GVSURPFS	FEDERAL GOVT SURP OR DEF(-)-----	-11.01	-40.6	-64.5	-56.5	-43.9	-37.2	-34.1	-22.2	-11.2	-4.4	-11.6
12 GVSURPSS	STATE & LOCAL SURP OR DEF(-)-----	27.11	23.9	23.2	24.8	26.2	28.4	29.4	31.8	32.3	31.4	33.6
13												
14 TFSDRS	CAPITAL GRANTS REC'D. BY U. S., NET	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15												
16 INGS	GROSS INVESTMENT-----	322.71	355.6	377.4	431.9	500.1	558.6	609.2	691.5	770.5	836.5	889.7
17 INTS	GROSS PRIVATE DOMESTIC INVESTMENT-	345.71	361.9	377.0	436.7	507.1	563.6	619.4	701.9	779.6	845.9	899.0
18 TRHFIS	NET FOREIGN INVESTMENT-----	-23.01	-6.4	0.4	-4.0	-7.0	-5.0	-10.3	-10.4	-9.1	-9.4	-9.2
19												
20 SDS	STATISTICAL DISCREPANCY-----	2.21	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
21												
22												
23	ADDENDUM											
24												
25 VARI	RATIO PERSONAL SAVING TO-----	24.31	26.1	27.5	26.4	26.4	26.1	26.0	26.0	26.0	25.8	25.5
26	GROSS PRIVATE SAVING											
27												
28 VAR2	RATIO UNDISTRIBUTED CORP. PROFITS--	14.41	14.2	14.4	15.3	15.9	15.7	14.9	15.6	15.9	15.4	14.8
29	ADJUSTED FOR CORP. IVA,											
30	TO GROSS PRIVATE SAVING											
31												
32 VAR3	RATIO CAP. CONG. ALLOW. TO-----	66.91	65.4	63.9	63.7	62.8	63.0	63.8	62.7	62.2	62.6	63.4

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TABLE 29.00 FINANCIAL SECTOR

LINE VAR LABEL	1970	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 FM43	976.2	1061.3	1150.0	1273.3	1407.1	1557.8	1711.2	1871.5	2042.0	2215.8	2388.3
2 FM43	10.8	8.7	8.4	10.7	10.5	10.7	9.8	9.4	9.1	8.5	7.8
3											
4 FCUS	97.7	107.6	118.0	130.2	141.9	157.3	174.7	193.5	212.2	232.0	254.9
5 FCUS	10.3	10.1	9.7	10.3	9.0	10.9	11.0	10.8	9.7	9.3	9.9
6											
7 FORDPS	265.9	279.6	301.7	334.0	360.0	394.0	438.0	486.7	533.4	584.4	620.3
8 FORDPS	7.0	9.3	7.9	11.0	7.5	9.5	11.2	11.1	9.6	9.6	6.1
9											
10 FDHYS	612.5	674.0	730.3	808.2	905.3	1006.5	1098.5	1191.3	1296.3	1399.4	1513.1
11 FDHYS	12.3	10.0	8.3	10.7	12.0	11.2	9.1	8.4	8.8	8.0	8.1
12											
13 FRREDIT	0.0466	0.0464	0.0458	0.0457	0.0456	0.0455	0.0454	0.0453	0.0452	0.0451	0.0450
14 FRRES	41.0	44.3	47.3	52.3	57.7	63.8	69.8	76.1	82.8	89.5	96.1
15 FRRES	40.2	44.3	47.2	52.2	57.6	64.0	70.0	76.2	82.6	89.4	96.2
16 FRRES	-0.7	-0.0	-0.2	-0.1	-0.1	0.2	0.2	0.1	-0.2	-0.1	0.1
17											
18 FRMOPR	7.43	9.54	8.63	8.03	8.20	7.92	7.46	6.78	6.48	6.57	6.42
19 FRMOPR	8.10	10.01	8.63	8.01	8.36	7.73	7.23	7.18	7.02	6.89	6.85
20											
21 FRMCS	9.06	9.79	9.64	9.78	9.91	9.31	9.04	8.78	8.56	8.35	8.30
22											
23 FRMCI	8.90	9.62	9.47	9.38	9.73	9.15	8.89	8.64	8.43	8.22	8.18
24 FRMCI	8.74	9.45	9.30	9.01	9.58	8.96	8.69	8.42	8.19	7.98	7.93
25 FRMCI	9.22	9.97	9.81	9.93	10.10	9.47	9.18	8.91	8.68	8.46	8.41
26											
27 FRMPE	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
28 FRMPE	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
29											
30 FRMSE	9.68	10.46	10.30	10.37	10.44	10.02	9.82	9.66	9.51	9.37	9.38
31 FRMSE	0.58	0.20	0.60	0.62	0.62	0.83	0.92	0.84	0.82	0.78	0.78
32											
33 FSELS	213.3	284.5	299.7	353.3	409.1	442.6	490.1	547.4	612.3	680.7	754.7
34 FSELS	104.0	114.0	122.0	132.0	142.2	153.3	164.1	176.9	195.3	213.9	232.1
35											
36 FRMCDM	6.59	10.72	9.04	9.42	9.47	9.12	8.72	8.42	8.22	8.12	8.02

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 30.00 FEDERAL GOVERNMENT RECEIPTS AND EXPENDITURES (CURRENT \$)

LINE	VAR LABEL	I	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GVRF3	1			429.01	467.1	491.3	550.4	615.9	679.1	741.5	815.0	890.1	965.2	1032.4
2															
3	TXCPFS	B			192.11	209.0	225.0	254.9	285.1	315.4	346.7	377.9	410.7	444.7	478.4
4	TXCCFS	B			71.51	69.4	66.5	80.5	91.1	102.4	109.8	123.1	135.6	145.6	151.9
5	TXCRFS	B			27.01	29.0	29.6	28.7	31.0	34.8	37.7	41.3	44.9	48.5	45.1
6	TXCBFCAS3	B			3.11	3.2	3.4	3.4	3.4	3.4	3.3	3.3	3.2	3.2	3.2
7	TXCRFNGS	E			0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	TXCBF-G-ES	B			24.11	25.7	26.2	25.2	26.4	31.4	34.4	38.0	41.7	45.3	41.9
9	TXCSFIS	I			138.41	159.8	170.2	186.3	205.9	226.5	248.3	272.7	298.8	326.4	355.1
10	TXCSFIS	B			100.01	126.4	133.2	144.4	150.0	173.9	189.8	207.7	226.7	246.9	267.9
11	TXCSFI-33	B			29.01	33.3	31.1	41.8	47.1	52.6	58.4	65.1	72.1	79.5	87.2
12															
13	GVFE3	1			460.91	507.7	555.0	606.0	659.0	716.3	775.6	837.2	901.4	969.6	1041.9
14															
15	GVPF3	I			153.31	167.0	180.9	197.7	215.3	233.6	252.7	272.5	293.0	314.8	337.5
16	GVPF03	I			99.71	106.5	115.3	125.4	135.0	146.6	157.8	169.3	181.1	193.5	206.4
17	GVPF03	I			53.71	61.3	65.6	72.4	79.5	87.0	94.9	103.2	111.9	121.3	131.1
18	TRGFS	I			185.91	208.4	236.2	259.7	286.1	315.0	345.6	377.3	410.3	449.9	483.7
19	TRGFS	I			182.31	204.3	231.6	255.0	281.2	309.9	340.3	371.8	404.6	439.9	477.5
20	TRTNPUS	A			9.21	9.8	11.7	11.8	12.1	13.1	14.1	14.9	14.6	15.1	15.9
21	TRGFPS	A			4.61	4.1	4.0	4.3	4.7	5.0	5.4	5.8	6.2	6.6	7.0
22	TRGFPMVS	A			26.21	29.3	32.6	36.2	39.9	43.9	48.0	52.4	57.0	61.8	66.9
23	TRGFPSH	A			26.01	31.1	37.4	43.0	48.0	55.2	62.1	69.7	77.8	86.8	96.4
24	TRGFPS03	A			91.01	104.3	119.6	130.9	144.3	158.6	173.6	189.4	205.9	223.4	241.7
25	TRGFPS03	A			24.61	25.6	26.4	28.7	31.3	34.1	37.0	40.0	43.0	46.2	49.5
26	TRGFS	E			3.31	4.1	4.3	4.7	4.9	5.1	5.3	5.5	5.8	6.0	6.2
27	GVGLAS	E			76.31	80.7	84.4	91.7	99.2	107.4	116.2	125.7	134.0	147.1	161.2
28	YINTGFS	E			35.51	41.3	44.8	47.0	48.5	49.6	50.5	51.0	51.4	51.1	50.8
29	GV3UNTFS	E			9.91	9.5	9.5	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7
30	GV3URPFS	E			-31.01	-40.6	-69.5	-56.5	-43.9	-37.2	-34.1	-22.2	-11.2	-4.4	-11.4
31															
32															
33	TXCPFS/VP3				11.21	11.1	10.96	11.26	11.45	11.58	11.70	11.70	11.71	11.74	11.74
34	TXCCFS/CPIURTS				35.301	32.69	29.74	30.30	30.72	30.74	30.76	30.76	30.80	30.81	30.82
35	TXCRFS/YNS				1.631	1.55	1.47	1.28	1.28	1.28	1.28	1.28	1.28	1.27	1.10
36	TXCBFCAS/CENG				6.121	5.74	5.39	5.00	4.66	4.35	4.08	3.85	3.64	3.45	3.28
37	TXCRF-G-ES/YNS				1.451	1.38	1.30	1.13	1.15	1.16	1.17	1.18	1.18	1.19	1.02
38	TXCSFI/MRCS				10.651	11.14	10.94	10.88	10.98	11.06	11.15	11.24	11.34	11.43	11.52

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
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TABLE 31.00 STATE AND LOCAL RECEIPTS AND EXPENDITURES (CURRENT \$)

LINE	VAR LABEL	I T E M	1970	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GVPS	I RECEIPTS	327.21	352.9	380.4	418.4	460.3	506.4	555.1	608.4	662.3	719.1	784.7
2													
3	TXCPSS	A PERSONAL INCOME TAX	63.11	70.5	78.0	86.5	100.0	112.2	125.2	140.3	156.4	173.3	194.8
4	TXCCSS	B CORPORATE PROFITS TAX	12.21	13.5	14.6	17.9	21.3	24.3	26.9	31.9	36.8	41.2	44.5
5	TXCRSS	R INDIRECT BUSINESS TAX	150.11	159.3	171.7	185.7	202.2	221.8	242.7	262.2	281.2	301.5	323.6
6	TXCRSSGAS	H INDIRECT BUSINESS TAX, GASOLINE	6.61	7.1	7.6	7.9	8.0	8.1	8.1	8.1	8.2	8.3	8.4
7	TXCRSSGAS	I INDIRECT BUSINESS TAX, OTHER	143.41	152.1	164.1	177.9	194.2	213.7	234.6	254.5	273.0	293.2	315.3
8	TXCSST	B CONTRIB FOR SOCIAL INSURANCE	25.61	28.9	31.6	34.5	37.5	40.8	44.2	47.9	51.9	56.2	60.6
9	GVCTAS	E FEDERAL GRANTS-IN-AID	76.31	80.7	84.4	91.7	99.2	107.4	116.2	125.7	136.0	147.1	161.2
10													
11	GVPS	I EXPENDITURES	100.11	330.0	357.2	393.5	434.1	478.0	525.7	576.6	630.0	687.9	751.1
12													
13	GVPS	I PURCHASES OF GOODS AND SERVICES	290.11	306.9	330.3	361.6	396.7	435.0	476.7	521.5	568.7	620.0	676.4
14	GVPSHWC	I EDUCATION	115.61	126.6	134.0	146.0	158.4	171.0	186.2	201.3	217.0	233.8	251.9
15	GVPSHWC	I HEALTH AND WELFARE	64.71	70.9	77.2	86.6	97.1	109.3	122.7	137.5	151.4	171.2	191.1
16	GVPSHWC	I SAFETY	22.01	24.2	25.9	28.6	31.7	35.2	38.9	42.9	47.3	52.0	57.2
17	GVPSHWC	I OTHER	77.71	85.2	92.4	100.4	109.2	118.7	129.0	139.8	151.0	163.1	176.2
18	TXCPSS	I TRANSFER PAYMENTS	33.71	38.4	43.6	48.7	54.0	59.7	65.6	71.7	78.0	84.5	91.4
19	YINTGSS	E NET INTEREST PAID	-7.71	-9.3	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7
20	GVSUBTSS	E LESS CURR SURP OF GOVT ENTER	-5.91	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0
21	GVSUBTSS	I SURPLUS OR DEFICIT (-)	27.11	22.9	23.2	24.8	26.2	28.4	29.4	31.0	32.3	31.4	33.6
22													
23		EFFECTIVE TAX RATES (%)											
24													
25	TXCPSS/VPS	PERSONAL INCOME TAX	3.701	3.75	3.80	3.91	4.02	4.12	4.22	4.34	4.46	4.57	4.78
26	TXCCSS/CPUBTS	CORPORATE PROFITS TAX	6.011	6.39	6.55	6.75	7.02	7.31	7.60	7.97	8.35	8.72	8.91
27	TXCRSS/VNS	INDIRECT BUSINESS TAX	8.021	8.54	8.53	8.31	8.17	8.18	8.24	8.13	7.98	7.91	7.90
28	TXCRSSGAS/CENO	INDIRECT BUSINESS TAX, GASOLINE	13.171	12.62	12.13	11.48	10.88	10.36	9.91	9.53	9.20	8.90	8.63
29	TXCRSSGAS/VNS	INDIRECT BUSINESS TAX, OTHER	6.431	6.15	6.15	7.96	7.65	7.89	7.97	7.68	7.75	7.69	7.70
30	TXCSST/WACS	CONTRIBUTIONS FOR SOCIAL INSURANCE	1.971	2.01	2.03	2.02	2.00	1.99	1.98	1.98	1.97	1.97	1.97

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
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TABLE 17.00 PERSONAL AND INDIRECT TAX RATES

LINE	VAR LABEL	I I E M	1976	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
STATE TAXES (EFFECTIVE RATES)													
1	1	PERSONAL INCOME	4.071	4.14	4.23	4.36	4.48	4.60	4.72	4.85	4.98	5.11	5.14
2	2	SOCIAL INSURANCE	2.121	2.18	2.21	2.19	2.17	2.16	2.16	2.15	2.15	2.14	2.14
3	3	CORPORATE INCOME	6.011	6.39	6.55	6.75	7.02	7.31	7.60	7.97	8.35	8.72	8.91
4	4	INDIRECT TAXES	8.021	8.54	8.53	8.31	8.17	8.18	8.24	8.13	7.98	7.91	7.90
FEDERAL TAXES													
5	1	PERSONAL INCOME (AVE RATE)	12.941	12.80	12.75	13.12	13.35	13.94	13.71	13.73	13.76	13.81	13.86
6	E	TAX RATE 1ST BRACKET	14.001	11.39	11.16	11.16	11.16	11.16	11.16	11.16	11.16	11.16	11.16
7	E	TAX RATE 2ND BRACKET	15.001	18.24	13.96	13.96	13.96	13.96	13.96	13.96	13.96	13.96	13.96
8	E	TAX RATE 3RD BRACKET	16.001	15.66	15.35	15.35	15.35	15.35	15.35	15.35	15.35	15.35	15.35
9	E	TAX RATE 4TH BRACKET	17.001	16.28	15.95	15.95	15.95	15.95	15.95	15.95	15.95	15.95	15.95
10	E	TAX RATE 5TH BRACKET	19.001	18.11	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74
11	E	TAX RATE 6TH BRACKET	22.001	20.83	20.42	20.42	20.42	20.42	20.42	20.42	20.42	20.42	20.42
12	E	TAX RATE 7TH BRACKET	25.001	23.80	23.33	23.33	23.33	23.33	23.33	23.33	23.33	23.33	23.33
13	E	TAX RATE 8TH BRACKET	28.001	27.46	26.92	26.92	26.92	26.92	26.92	26.92	26.92	26.92	26.92
14	E	TAX RATE 9TH BRACKET	32.001	31.13	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50
INCOME PROP. BY TAX BRACKET													
15	B	PROPORTION IN 1ST BRACKET	0.042610	0.0319	0.0291	0.0282	0.0277	0.0273	0.0264	0.0236	0.0209	0.0184	0.0163
16	B	PROPORTION IN 2ND BRACKET	0.045710	0.0350	0.0321	0.0309	0.0302	0.0297	0.0286	0.0256	0.0227	0.0200	0.0177
17	B	PROPORTION IN 3RD BRACKET	0.066210	0.0533	0.0455	0.0430	0.0411	0.0396	0.0375	0.0329	0.0284	0.0242	0.0204
18	B	PROPORTION IN 4TH BRACKET	0.058410	0.0554	0.0522	0.0495	0.0476	0.0462	0.0442	0.0395	0.0349	0.0305	0.0267
19	B	PROPORTION IN 5TH BRACKET	0.300710	0.2822	0.2771	0.2694	0.2692	0.2705	0.2703	0.2633	0.2563	0.2495	0.2411
20	B	PROPORTION IN 6TH BRACKET	0.205610	0.2245	0.2286	0.2281	0.2267	0.2256	0.2270	0.2318	0.2361	0.2399	0.2438
21	B	PROPORTION IN 7TH BRACKET	0.120610	0.1667	0.1947	0.1583	0.1585	0.1560	0.1557	0.1668	0.1778	0.1883	0.1976
22	B	PROPORTION IN 8TH BRACKET	0.160210	0.1730	0.1807	0.1926	0.1991	0.2032	0.2104	0.2166	0.2228	0.2291	0.2343
EXEMPTIONS & DEDUCTIONS (MILLION CURRENT \$)													
23	B	TOTAL NUMBER OF RETURNS	90.521	93.13	95.89	98.15	100.18	101.93	103.51	105.34	107.26	109.14	110.76
24	B	NUMBER OF EXEMPTIONS	239.661	232.56	236.73	236.99	239.06	240.87	242.53	244.54	246.69	248.78	250.60
25	E	VALUE OF EXEMPTIONS (THOU)	0.7301	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
26	B	NUMBER OF STAN DEDUCTIONS	58.221	59.08	59.87	60.29	60.32	59.97	59.41	59.11	59.02	58.84	58.20
27	E	VALUE OF STAN DEDUC PER RET	2.5301	2.689	2.870	3.047	3.224	3.405	3.578	3.750	3.922	4.094	4.266
28	B	NUMBER OF ITEM DEDUCTIONS	6.2801	6.127	6.298	6.904	7.643	8.423	9.198	10.065	10.947	11.822	12.671
29	E	VALUE OF ITEM DEDUC PER RET	147.31	158.9	181.8	183.7	194.5	204.2	212.6	221.7	231.5	240.9	248.3
30	B	NUMBER OF STAN DEDUCTIONS	203.11	208.6	223.6	261.4	305.4	353.4	405.6	465.2	528.1	594.6	666.0
31	E	VALUE OF STAN DEDUC PER RET	350.41	367.5	395.4	445.1	499.8	557.6	618.1	686.9	759.5	835.4	914.3
32	B	NUMBER OF ITEM DEDUCTIONS	0.64310	0.634	0.6244	0.6143	0.6022	0.5883	0.5740	0.5612	0.5503	0.5392	0.5285
33	B	RATIO 3D RETURNS TO TOTAL											

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 45.10 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	CCACPS	-18.12	-21.43	-24.11	-25.11	-26.11	-27.11	-28.11	-29.11	-30.11	-31.11	-32.11
2	CCAAVENTB3	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
3	CCAAVENTB3	-5.23	-5.76	-6.56	-7.36	-8.16	-8.96	-9.76	-10.56	-11.36	-12.16	-12.96
4	CCAAVENTB3	-20.94	-23.08	-25.08	-27.08	-29.08	-31.08	-33.08	-35.08	-37.08	-39.08	-41.08
5	CCARNTAG	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
6	CCARNTAG	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
7	CCARNTAG	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
8	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	CCARNTAG	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
10	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	CCARNTAG	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
12	CCARNTAG	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
13	CCARNTAG	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
14	CCARNTAG	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
15	CCARNTAG	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
16	CCARNTAG	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
17	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	CCARNTAG	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
21	CCARNTAG	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
22	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	CCARNTAG	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
25	CCARNTAG	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
26	CCARNTAG	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
27	CCARNTAG	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
28	CCARNTAG	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
29	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	CCARNTAG	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
31	CCARNTAG	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500
32	CCARNTAG	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
33	CCARNTAG	0.863	0.863	0.863	0.863	0.863	0.863	0.863	0.863	0.863	0.863	0.863
34	CCARNTAG	23.18	25.85	28.86	28.96	29.06	29.16	29.26	29.36	29.46	29.56	29.66
35	CCARNTAG	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08
36	CCARNTAG	3.40	3.30	3.30	3.30	3.37	3.43	3.50	3.57	3.64	3.72	3.79
37	CCARNTAG	15.60	15.90	16.10	16.10	16.30	16.50	16.70	16.90	17.10	17.30	17.50
38	CCARNTAG	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
39	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	CCARNTAG	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
42	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	CCARNTAG	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
46	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	CCARNTAG	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
48	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	CCARNTAG	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
50	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	CCARNTAG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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TABLE 45.10 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1970	1971	1972	1973	1974	1975	1976	1977	1978
1	DUMPMFN22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	DUMPMFN26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	DUMSTL3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	DUMSTPMFD25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	DUMSTPMFD17SP2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	DUMSTPMFN26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	DUMSTPMFN30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	DUMSTPMG	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	DUMTIME46	78.00	79.00	81.00	82.00	83.00	84.00	85.00	86.00	87.00
10	DUMTRIOPO	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
11	DUMTXCRAH10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
12	DUMTXCR65	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
13	DUMTXCPF65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	DUMTXCPF69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	DUMTXCPF72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	DUMTXCPF73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	DUMTXPF47,71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	DUMTXPF64,69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	DUMTXPF70,71	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77
20	DUMTXPF71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	DUMWAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	DUMWRCMFD33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	DUMWRCMFD21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	DUM70-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	FREFS*	-0.734	-0.000	-0.194	-0.100	-0.200	-0.200	-0.200	-0.100	-0.100
26	FMRPE	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
27	FMCNC	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
28	FMRDFA	7.43	9.34	8.63	7.92	7.46	6.78	6.48	6.57	6.42
29	FMRDJA	8.59	10.72	9.04	9.12	8.12	8.42	8.22	8.12	8.02
30	FMRDIT	0.0466	0.0464	0.0458	0.0456	0.0454	0.0452	0.0452	0.0451	0.0450
31	GVGLAS	76.30	80.67	84.45	89.22	107.36	114.16	135.68	147.14	161.21
32	GVPP/NEETIGV	16.281	37.144	37.801	38.554	40.881	41.976	42.331	43.086	43.841
33	GVPPD	65.05	65.34	66.72	67.84	70.18	71.37	72.50	75.07	76.31
34	GVPPD	35.04	37.61	37.99	40.38	41.63	42.92	44.25	47.04	48.47
35	GVPS/NEETIGVS	13.601	13.623	13.803	13.763	13.943	14.123	14.303	14.483	14.663
36	GVPSOEN	72.15	73.92	74.11	75.21	76.60	79.59	81.19	84.18	85.74
37	GVPSOHWC	40.42	41.42	42.43	44.60	49.64	52.46	55.40	61.66	65.05
38	GVPSOHMC	13.76	14.10	14.24	14.76	15.96	16.63	17.31	18.00	19.47
39	GVPSOHES	48.51	49.71	50.83	51.71	53.91	55.13	56.34	58.73	60.00
40	GVSHUTS	9.87	9.47	9.52	10.72	10.72	10.72	10.72	10.72	10.72
41	GVSHUTS3	-5.92	-6.00	-6.00	-6.00	-6.00	-6.00	-6.00	-6.00	-6.00
42	HORTISM	1.214	1.203	1.221	1.204	1.171	1.155	1.139	1.106	1.106
43	HORTUS1	0.595	0.592	0.595	0.595	0.595	0.595	0.595	0.595	0.595
44	HSPRF	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
45	HSPRUSH	0.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	HSPJ31	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
47	IAMFN21	0.17	0.17	0.17	0.19	0.20	0.21	0.22	0.24	0.25
48	IBFRE	1.32	1.28	1.30	1.48	1.58	1.78	1.98	2.08	2.18
49	IBRHF	0.82	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
50	IRIF	-0.70	-0.12	0.25	0.45	-0.17	0.05	0.17	0.10	0.10
51	ITRAAG	5.920	5.920	7.696	7.696	7.696	7.696	7.696	7.696	7.696

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TABLE 45.10 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	ITRACM	5.29	5.29	6.87	6.07	6.07	6.87	6.87	6.87	6.87	6.87	6.87
2	ITRAMFD24	8.46	8.46	10.99	10.99	10.99	10.99	10.99	10.99	10.99	10.99	10.99
3	ITRAMFD25	6.55	6.55	8.52	8.52	8.52	8.52	8.52	8.52	8.52	8.52	8.52
4	ITRAMFD32	8.14	8.14	10.58	10.58	10.58	10.58	10.58	10.58	10.58	10.58	10.58
5	ITRAMFD33	8.56	8.56	11.12	11.12	11.12	11.12	11.12	11.12	11.12	11.12	11.12
6	ITRAMFD34	7.88	7.88	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25
7	ITRAMFD35	6.31	6.31	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20
8	ITRAMFD36	7.93	7.93	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31
9	ITRAMFD37SP2	7.31	7.31	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50
10	ITRAMFD37I	8.97	8.97	11.66	11.66	11.66	11.66	11.66	11.66	11.66	11.66	11.66
11	ITRAMFD38	7.57	7.57	9.84	9.84	9.84	9.84	9.84	9.84	9.84	9.84	9.84
12	ITRAMFN20	7.74	7.74	10.07	10.07	10.07	10.07	10.07	10.07	10.07	10.07	10.07
13	ITRAMFN21	8.41	8.41	10.93	10.93	10.93	10.93	10.93	10.93	10.93	10.93	10.93
14	ITRAMFN22	8.38	8.38	10.89	10.89	10.89	10.89	10.89	10.89	10.89	10.89	10.89
15	ITRAMFN23	7.02	7.02	9.12	9.12	9.12	9.12	9.12	9.12	9.12	9.12	9.12
16	ITRAMFN26	9.10	9.10	11.83	11.83	11.83	11.83	11.83	11.83	11.83	11.83	11.83
17	ITRAMFN27	7.89	7.89	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26
18	ITRAMFN28	8.69	8.69	11.29	11.29	11.29	11.29	11.29	11.29	11.29	11.29	11.29
19	ITRAMFN29	6.31	6.31	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20
20	ITRAMFN30	8.16	8.16	10.61	10.61	10.61	10.61	10.61	10.61	10.61	10.61	10.61
21	ITRAMFN31	5.18	5.18	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74
22	ITRAMG	6.19	6.19	8.05	8.05	8.05	8.05	8.05	8.05	8.05	8.05	8.05
23	ITRAMGC48	5.02	5.02	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53
24	ITRAMGT	6.30	6.30	8.19	8.19	8.19	8.19	8.19	8.19	8.19	8.19	8.19
25	ITRAMGU9	5.58	5.58	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25
26	LNITG	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05
27	LNITCM	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17
28	LNITFD24	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61
29	LNITFD25	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81
30	LNITFD32	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26
31	LNITFD33	17.60	17.60	17.60	17.60	17.60	17.60	17.60	17.60	17.60	17.60	17.60
32	LNITFD34	16.40	16.40	16.40	16.40	16.40	16.40	16.40	16.40	16.40	16.40	16.40
33	LNITFD35	16.86	16.86	16.86	16.86	16.86	16.86	16.86	16.86	16.86	16.86	16.86
34	LNITFD36	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30
35	LNITFD37SP2	16.46	16.46	16.46	16.46	16.46	16.46	16.46	16.46	16.46	16.46	16.46
36	LNITFD37I	11.64	11.64	11.64	11.64	11.64	11.64	11.64	11.64	11.64	11.64	11.64
37	LNITFD38	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60
38	LNITFN20	17.04	17.04	17.04	17.04	17.04	17.04	17.04	17.04	17.04	17.04	17.04
39	LNITFN21	16.97	16.97	16.97	16.97	16.97	16.97	16.97	16.97	16.97	16.97	16.97
40	LNITFN22	15.37	15.37	15.37	15.37	15.37	15.37	15.37	15.37	15.37	15.37	15.37
41	LNITFN23	16.29	16.29	16.29	16.29	16.29	16.29	16.29	16.29	16.29	16.29	16.29
42	LNITFN26	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73
43	LNITFN27	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50
44	LNITFN28	13.37	13.37	13.37	13.37	13.37	13.37	13.37	13.37	13.37	13.37	13.37
45	LNITFN29	24.63	24.63	24.63	24.63	24.63	24.63	24.63	24.63	24.63	24.63	24.63
46	LNITFN30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30
47	LNITFN31	18.44	18.44	18.44	18.44	18.44	18.44	18.44	18.44	18.44	18.44	18.44
48	LNITG	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17
49	LNITGC48	23.75	23.75	23.75	23.75	23.75	23.75	23.75	23.75	23.75	23.75	23.75
50	LNITGT	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11
51	LNITGU9	33.90	33.90	33.90	33.90	33.90	33.90	33.90	33.90	33.90	33.90	33.90

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TABLE 45.10 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
1	MPGC	11,290	12,900	14,160	15,420	16,685	17,319	17,682	17,859	18,038	18,218
2	MPGH	20,950	22,220	23,780	25,920	28,045	30,149	31,518	31,754	31,991	32,232
3	MWR	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350
4	NCV	59.27	60.26	61.27	62.31	63.32	64.29	65.20	66.10	66.97	67.82
5	NCH	15.94	17.50	19.06	20.65	22.24	23.82	25.40	26.97	28.54	30.11
6	NCU	21.57	22.68	23.78	24.88	25.98	27.08	28.18	29.28	30.38	31.48
7	MEMISE	6278.66	6435.00	6591.00	6747.00	6903.00	7059.00	7215.00	7371.00	7527.00	7683.00
8	MEMHIF	478.17	470.00	470.00	470.00	470.00	470.00	470.00	470.00	470.00	470.00
9	MEMHWS-ET	-1388.51	-1500.44	-1476.00	-1452.00	-1428.00	-1404.00	-1380.00	-1356.00	-1332.00	-1308.00
10	NLM	2.12	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07
11	NLMINDIT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	NPFR	1836.89991853	1870.80001916	1904.80001944	1938.80001972	1972.80002000	2006.80002028	2040.80002056	2074.80002084	2108.80002112	2142.80002120
13	NPFR15.19	55.2000	55.5000	55.8000	56.1000	56.4000	56.7000	57.0000	57.3000	57.6000	57.9000
14	NPFR20.24	118.3000	121.3000	124.3000	127.3000	130.3000	133.3000	136.3000	139.3000	142.3000	145.3000
15	NPFR16.17	4.13	4.06	3.99	3.92	3.85	3.78	3.71	3.64	3.57	3.50
16	NPFR18.19	4.21	4.23	4.25	4.27	4.29	4.31	4.33	4.35	4.37	4.39
17	NPFR20.24	10.16	10.30	10.44	10.58	10.72	10.86	11.00	11.14	11.28	11.42
18	NPFR25.29	9.06	9.25	9.44	9.63	9.82	10.01	10.20	10.39	10.58	10.77
19	NPFR10.34	8.01	8.35	8.69	9.03	9.37	9.71	10.05	10.39	10.73	11.07
20	NPFR35.39	6.67	6.94	7.21	7.48	7.75	8.02	8.29	8.56	8.83	9.10
21	NPFR40.44	5.80	5.90	6.00	6.10	6.20	6.30	6.40	6.50	6.60	6.70
22	NPFR45.49	5.82	5.74	5.65	5.56	5.47	5.38	5.29	5.20	5.11	5.02
23	NPFR50.54	6.13	6.06	6.02	5.94	5.86	5.79	5.71	5.64	5.56	5.48
24	NPFR55.59	5.87	5.93	5.94	5.95	5.96	5.97	5.98	5.99	6.00	6.01
25	NPFR60.64	5.01	5.09	5.21	5.32	5.46	5.56	5.63	5.69	5.75	5.81
26	NPFR65.69	4.77	4.82	4.84	4.88	4.90	4.94	4.96	4.98	5.00	5.02
27	NPFR70.74	3.67	3.80	3.94	4.03	4.10	4.16	4.22	4.26	4.28	4.31
28	NPFR75.79	5.00	5.94	6.08	6.24	6.40	6.50	6.60	6.70	6.80	6.90
29	NPFR16.17	4.29	4.22	4.16	4.04	3.84	3.69	3.50	3.28	3.03	2.77
30	NPFR18.19	4.30	4.32	4.32	4.24	4.16	4.06	3.87	3.62	3.36	3.07
31	NPFR20.24	10.29	10.43	10.51	10.61	10.60	10.54	10.47	10.31	10.14	9.90
32	NPFR25.29	8.98	9.18	9.43	9.62	9.83	10.02	10.15	10.24	10.31	10.38
33	NPFR30.34	7.88	8.21	8.55	8.99	9.13	9.33	9.57	9.77	9.99	10.17
34	NPFR35.39	6.39	6.69	6.87	7.00	7.37	7.81	8.49	9.02	9.69	10.04
35	NPFR40.44	5.52	5.61	5.69	5.84	6.05	6.41	6.89	7.02	7.50	7.83
36	NPFR45.49	5.34	5.47	5.50	5.56	5.63	5.71	5.75	5.75	5.95	6.31
37	NPFR50.54	5.70	5.66	5.64	5.60	5.54	5.47	5.39	5.29	5.31	5.16
38	NPFR55.59	5.37	5.43	5.45	5.46	5.42	5.40	5.35	5.31	5.25	5.18
39	NPFR60.64	4.81	4.88	4.90	4.88	4.82	4.91	4.97	4.99	4.96	4.95
40	NPFR65.69	3.79	3.84	3.87	3.90	3.92	3.95	4.01	4.21	4.33	4.41
41	NPFR70.74	2.68	2.76	2.86	2.91	2.97	3.01	3.06	3.11	3.11	3.15
42	NPFR75.79	3.28	3.34	3.41	3.48	3.56	3.65	3.74	3.85	4.02	4.10
43	NPFR10.04	15.36	15.68	16.09	16.69	17.33	17.98	18.68	19.15	19.33	19.45
44	NPFR10.04	16.89	16.49	16.10	15.57	15.42	15.54	16.26	16.86	17.51	18.12
45	NPFR10.04	16.89	16.49	16.10	15.57	15.42	15.54	16.26	16.86	17.51	18.12
46	NPFR10.14	16.50	16.06	15.67	15.22	14.84	14.44	14.04	13.64	13.24	12.84
47	NPFR15	4.14	4.08	3.91	3.69	3.59	3.51	3.44	3.32	3.41	3.23
48	NPFR15	132.25	139.19	146.15	157.63	168.76	180.53	192.14	203.96	215.77	227.58
49	NPFR15	179.35	201.11	221.79	234.75	247.68	260.60	273.63	286.98	300.13	313.27
50	NPFR15	140.76	148.91	152.50	156.16	159.91	163.75	167.68	171.70	175.82	180.05
51	NPFR15	148.95	155.10	159.29	163.59	168.01	172.54	177.20	181.98	186.90	191.94

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TABLE 45.10 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	PTIMW	225.67	242.50	259.12	270.25	297.10	316.30	336.50	350.22	360.61	404.10	420.31
2	PTIMR3DE	140.40	151.06	160.34	165.94	171.71	175.77	179.90	184.12	188.45	192.68	197.41
3	PTIMEGICH	393.04	410.96	445.19	477.71	511.01	542.90	570.96	615.60	651.99	688.50	727.02
4	PTIMEGIFC	290.15	291.34	309.54	334.96	360.67	387.95	415.26	442.66	471.04	499.29	520.96
5	PTIMEGIFM	146.10	155.50	165.00	179.51	193.24	206.88	220.56	235.26	249.96	264.66	280.00
6	PTIMEGIFH	196.23	215.12	229.03	244.03	250.26	273.11	288.31	304.41	321.17	338.25	356.23
7	PTIMEGINS	270.70	301.60	338.70	372.57	402.38	426.52	449.98	474.27	499.41	525.18	552.17
8	PURGITF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	PURGIT3	0.60	0.60	0.00	0.18	0.35	0.53	0.71	0.91	10.11	10.31	10.51
10	PUTMCGIUT	0.99	9.53	10.05	10.60	11.19	11.80	12.45	13.13	13.86	14.62	15.42
11	PUTMCGI32V	53.45	50.39	59.50	62.77	66.22	69.87	73.71	77.76	82.04	86.55	91.31
12	PUTMCGI331	14.55	15.71	16.65	17.73	18.60	19.63	20.82	21.86	22.96	24.10	25.31
13	PUTMCGI3324	10.60	11.24	11.95	12.47	13.12	13.81	14.54	15.30	16.11	16.96	17.85
14	PUTMCGI334	277.10	306.20	330.70	354.30	377.90	401.50	425.10	448.70	472.30	495.90	520.69
15	PXVGRTIVA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	RACEDAVN	0.6034	0.6470	0.6332	0.6204	0.6104	0.6164	0.6144	0.6124	0.6104	0.6084	0.6064
17	RACENGAUTO	0.3205	0.3161	0.3082	0.3062	0.3082	0.3502	0.3522	0.3542	0.3562	0.3582	0.3602
18	RATXCFT-S	2,000	2,050	2,100	2,150	2,200	2,250	2,300	2,350	2,400	2,450	2,500
19	RAWLSC	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000	92,000
20	RAYP31	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
21	REXCA	87.75	86.63	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00
22	REXFR	22.14	21.25	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
23	REXGE	49.84	5,000	51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00
24	REX17	0.1175	0.1152	0.1135	0.1135	0.1135	0.1135	0.1135	0.1135	0.1135	0.1135	0.1135
25	REXJA	0.8009	0.5050	0.5100	0.5100	0.5100	0.5100	0.5100	0.5100	0.5100	0.5100	0.5100
26	REXME	4.392	4,100	4,000	3,490	3,490	3,490	3,490	3,490	3,490	3,490	3,490
27	REXIM	191.34	187.00	185.00	185.54	185.54	185.54	186.09	186.09	186.09	186.09	186.09
28	30S	2.17	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

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TABLE 45.20 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TEBAS	-1.16	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
2	TEBES	-0.57	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40
3	TEBES	8.20	9.91	9.91	10.20	10.50	10.80	11.10	11.40	11.70	12.00	12.30
4	TEBIFRS	6.70	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
5	TEBIFRS	9.97	10.60	11.40	12.82	14.40	16.17	18.16	20.34	22.41	24.46	26.70
6	TECDDPL4805	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
7	TECGD3	1.49	1.49	1.28	1.29	1.29	1.29	1.49	1.59	1.69	1.79	1.89
8	TEGUG12203	5.00	6.42	7.13	7.52	7.92	8.32	8.72	9.12	9.52	9.92	10.32
9	TEUG13	18.84	17.22	19.32	20.92	22.68	24.61	26.74	29.07	31.40	33.73	36.06
10	IFBTA	-5.25	-5.10	-5.10	-5.10	-5.10	-5.10	-5.10	-5.10	-5.10	-5.10	-5.10
11	ITMW	136.18	143.26	149.71	156.69	163.90	171.64	180.94	190.84	200.37	210.57	220.57
12	IMBAS	-0.83	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90
13	IMBAS	-3.19	-3.05	-3.05	-3.05	-3.05	-3.05	-3.05	-3.05	-3.05	-3.05	-3.05
14	IMBDES	6.77	7.16	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88
15	IMBIFRS	2.17	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
16	IMBIFRS	4.66	5.23	5.83	6.40	6.97	7.60	8.28	8.93	9.64	10.33	11.09
17	IMBIFRS	302.00	314.00	325.00	331.50	338.13	344.89	351.79	358.82	366.00	373.32	380.79
18	IMBIFRS	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70
19	IMBIFRS	2204.70	2455.00	2660.00	2899.41	3131.41	3350.64	3568.46	3768.12	3968.06	4166.48	4366.49
20	IMBIFRS	511.00	531.00	550.00	580.24	609.95	639.62	669.84	699.83	729.83	759.82	789.81
21	IMBIFRS	1000.00	1050.00	1100.00	1150.00	1200.00	1250.00	1300.00	1350.00	1400.00	1450.00	1500.00
22	IMBIFRS	0.119	0.1235	0.1285	0.1335	0.1385	0.1435	0.1485	0.1535	0.1585	0.1635	0.1685
23	IMBIFRS	0.1205	0.1191	0.1169	0.1149	0.1129	0.1109	0.1089	0.1069	0.1049	0.1029	0.1009
24	IMBIFRS	10.69	11.84	13.01	14.21	15.41	16.61	17.81	19.01	20.21	21.41	22.61
25	IMBIFRS	3.55	4.07	4.55	5.03	5.51	5.99	6.47	6.95	7.43	7.91	8.39
26	IMBIFRS	2.82	2.30	2.13	2.10	2.22	2.26	2.30	2.34	2.39	2.43	2.48
27	IMBIFRS	17.40	18.20	19.00	19.80	20.49	21.21	21.95	22.72	23.52	24.34	25.19
28	IMBIFRS	16.35	15.93	15.39	15.69	16.08	16.49	16.90	17.32	17.75	18.20	18.65
29	IMBIFRS	16.54	18.37	20.60	21.83	22.92	24.07	25.27	26.53	27.86	29.25	30.71
30	IMBIFRS	61.03	64.93	69.79	71.94	76.63	79.31	82.09	84.96	87.94	91.01	94.18
31	IMBIFRS	22.39	23.87	25.46	26.59	27.72	28.85	29.98	31.08	32.18	33.28	34.41
32	IMBIFRS	1.07	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
33	IMBIFRS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	IMBIFRS	42.14	40.91	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50
35	IMBIFRS	2.51	2.69	2.87	3.03	3.22	3.40	3.58	3.75	3.92	4.09	4.27
36	IMBIFRS	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
37	IMBIFRS	17.10	22.90	22.90	22.90	24.50	26.22	28.05	30.02	32.12	34.37	36.77
38	IMBIFRS	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030
39	IMBIFRS	13.20	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
40	IMBIFRS	67.00	67.00	67.00	67.00	67.00	67.00	67.00	67.00	67.00	67.00	67.00
41	IMBIFRS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	IMBIFRS	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
43	IMBIFRS	34.58	33.14	30.98	30.98	30.98	30.98	30.98	30.98	30.98	30.98	30.98
44	IMBIFRS	24.33	23.32	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80
45	IMBIFRS	31.48	29.71	29.71	29.71	29.71	29.71	29.71	29.71	29.71	29.71	29.71
46	IMBIFRS	31.94	30.61	28.62	28.62	28.62	28.62	28.62	28.62	28.62	28.62	28.62
47	IMBIFRS	39.12	37.49	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05
48	IMBIFRS	40.18	38.50	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00
49	IMBIFRS	40.20	38.50	36.37	36.37	36.37	36.37	36.37	36.37	36.37	36.37	36.37
50	IMBIFRS	41.03	41.24	40.55	40.55	40.55	40.55	40.55	40.55	40.55	40.55	40.55
51	IMBIFRS	41.03	41.24	40.55	40.55	40.55	40.55	40.55	40.55	40.55	40.55	40.55

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TABLE 45.20 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TXRIEFMD16	40.95	36.69	36.69	36.69	36.69	36.69	36.69	36.69	36.69	36.69
2	TXRIEFMD37SP2	39.47	35.36	35.36	35.36	35.36	35.36	35.36	35.36	35.36	35.36
3	TXRIEFMD37I	41.57	38.07	38.07	38.07	38.07	38.07	38.07	38.07	38.07	38.07
4	TXRIEFMD38	41.04	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56
5	TXRIEFMD20	42.77	39.12	39.12	39.12	39.12	39.12	39.12	39.12	39.12	39.12
6	TXRIEFMD21	41.05	39.12	39.12	39.12	39.12	39.12	39.12	39.12	39.12	39.12
7	TXRIEFMD22	42.20	37.88	37.88	37.88	37.88	37.88	37.88	37.88	37.88	37.88
8	TXRIEFMD23	38.04	34.08	34.08	34.08	34.08	34.08	34.08	34.08	34.08	34.08
9	TXRIEFMD26	41.33	37.03	37.03	37.03	37.03	37.03	37.03	37.03	37.03	37.03
10	TXRIEFMD27	40.26	36.07	36.07	36.07	36.07	36.07	36.07	36.07	36.07	36.07
11	TXRIEFMD28	41.46	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11
12	TXRIEFMD29	33.31	29.85	29.85	29.85	29.85	29.85	29.85	29.85	29.85	29.85
13	TXRIEFMD30	40.61	36.57	36.57	36.57	36.57	36.57	36.57	36.57	36.57	36.57
14	TXRIEFMD31	39.93	35.78	35.78	35.78	35.78	35.78	35.78	35.78	35.78	35.78
15	TXRIEFMD32	44.43	39.01	39.01	39.01	39.01	39.01	39.01	39.01	39.01	39.01
16	TXRIEFMD33	44.39	39.77	39.77	39.77	39.77	39.77	39.77	39.77	39.77	39.77
17	TXRIEFMD34	34.94	31.30	31.30	31.30	31.30	31.30	31.30	31.30	31.30	31.30
18	TXRIEFMD35	43.61	39.07	39.07	39.07	39.07	39.07	39.07	39.07	39.07	39.07
19	TXRIEFMD36	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98
20	TXRIEFMD37	46.50	46.50	46.50	46.50	46.50	46.50	46.50	46.50	46.50	46.50
21	TXRIEFMD38	5.06	5.26	5.41	5.56	5.71	5.86	6.01	6.16	6.31	6.46
22	TXRIEFMD39	14.00	11.16	11.16	11.16	11.16	11.16	11.16	11.16	11.16	11.16
23	TXRIEFMD40	15.00	13.96	13.96	13.96	13.96	13.96	13.96	13.96	13.96	13.96
24	TXRIEFMD41	16.00	15.35	15.35	15.35	15.35	15.35	15.35	15.35	15.35	15.35
25	TXRIEFMD42	17.00	15.95	15.95	15.95	15.95	15.95	15.95	15.95	15.95	15.95
26	TXRIEFMD43	19.00	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74
27	TXRIEFMD44	22.00	20.42	20.42	20.42	20.42	20.42	20.42	20.42	20.42	20.42
28	TXRIEFMD45	25.00	23.33	23.33	23.33	23.33	23.33	23.33	23.33	23.33	23.33
29	TXRIEFMD46	26.00	26.92	26.92	26.92	26.92	26.92	26.92	26.92	26.92	26.92
30	TXRIEFMD47	32.00	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50
31	TXRIEFMD48	12.10	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26
32	TXRIEFMD49	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	TXRIEFMD50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	TXRIEFMD51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	TXRIEFMD52	24.34	30.65	32.65	34.65	36.65	38.65	40.65	42.65	44.65	47.11
36	TXRIEFMD53	33.66	42.20	45.20	48.20	51.20	54.20	57.20	60.20	63.20	66.20
37	TXRIEFMD54	35.50	48.79	46.96	48.44	49.54	50.46	50.96	51.36	51.66	50.76
38	TXRIEFMD55	6.47	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77
39	TXRIEFMD56	-7.75	-10.68	-10.68	-10.68	-10.68	-10.68	-10.68	-10.68	-10.68	-10.68
40	TXRIEFMD57	121.09	126.43	137.90	143.28	148.86	154.67	160.70	166.97	173.48	180.24
41	TXRIEFMD58	167.38	181.35	200.01	220.91	234.61	249.15	264.60	280.42	298.42	316.93
42	TXRIEFMD59	112.21	117.93	130.12	135.33	140.74	146.37	152.23	158.32	164.65	171.23
43	TXRIEFMD60	178.55	197.34	215.22	228.13	256.33	271.71	288.01	305.29	323.61	343.02
44	TXRIEFMD61	111.64	117.39	122.68	128.01	135.25	142.01	149.11	156.57	164.40	172.62
45	TXRIEFMD62	135.45	139.16	143.62	148.19	153.33	158.00	163.45	168.60	173.37	178.63
46	TXRIEFMD63	118.17	122.00	126.07	130.47	135.25	140.45	145.67	151.62	157.20	163.21
47	TXRIEFMD64	216.16	262.56	290.36	307.78	326.25	345.63	366.57	388.57	411.88	436.60
48	TXRIEFMD65	120.65	127.89	135.55	143.69	151.35	159.13	167.40	175.40	183.83	192.29
49	TXRIEFMD66	190.70	197.13	214.57	224.22	234.31	244.86	255.80	267.39	279.42	291.99
50	TXRIEFMD67	143.79	151.99	162.46	171.42	185.00	193.74	202.86	211.57	221.09	231.04
51	TXRIEFMD68	274.08	320.49	365.40	408.46	456.33	504.33	554.96	608.52	665.21	725.21
52	TXRIEFMD69	251.04	268.92	279.68	300.65	327.44	354.33	381.51	408.62	436.99	468.79
53	TXRIEFMD70	105.98	110.49	114.94	119.60	125.18	130.96	136.33	141.91	147.49	153.07
54	TXRIEFMD71	230.34	250.55	276.09	295.17	314.65	335.41	357.55	381.15	406.30	431.12

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TABLE 45.30 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1970	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	CCATAGS	0.07	-0.02	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
2	CCATCO1	-0.76	-0.97	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66	-0.66
3	CCATMFD248	-0.02	-0.04	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
4	CCATMFD258	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
5	CCATMFD323	0.00	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
6	CCATMFD338	0.11	0.15	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
7	CCATMFD348	-0.00	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
8	CCATMFD358	0.00	-0.03	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05
9	CCATMFD368	-0.07	-0.11	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19
10	CCATMFD378	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
11	CCATMFD388	-0.11	-0.18	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25
12	CCATMFD398	0.00	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
13	CCATMFD408	0.00	-0.01	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
14	CCATMFD418	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
15	CCATMFD428	-0.01	-0.03	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
16	CCATMFD438	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
17	CCATMFD448	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
18	CCATMFD458	-0.01	-0.03	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
19	CCATMFD468	0.10	0.14	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
20	CCATMFD478	-0.03	-0.05	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08
21	CCATMFD488	-0.03	-0.05	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08
22	CCATMFD498	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	CCATMFD508	0.00	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
24	CCATMFD518	0.11	0.31	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
25	CCATMFD528	0.02	0.21	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
26	CCATMFD538	0.03	-0.01	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
27	CCATMFD548	-0.34	-0.34	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
28	CCATMFD558	0.49	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	CCATMFD568	0.00	0.00	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20
30	CCATMFD578	-0.62	-0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	CCATMFD588	3.70	5.53	5.87	5.38	4.89	4.40	3.91	2.52	1.13	-0.26	-1.65
32	CCATMFD598	0.82	1.59	1.75	1.87	1.99	0.91	0.63	0.35	0.07	-0.21	-0.49
33	CCATMFD608	-0.32	1.05	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
34	CCATMFD618	2.76	1.59	-1.13	-1.13	-1.13	-1.13	-1.13	-1.13	-1.13	-1.13	-1.13
35	CCATMFD628	0.27	0.59	0.08	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38
36	CCATMFD638	-1.39	0.38	1.68	1.98	2.28	2.58	2.88	3.18	3.48	3.78	4.08
37	CCATMFD648	0.10	-0.38	-0.54	-0.54	-0.54	-0.54	-0.54	-0.54	-0.54	-0.54	-0.54
38	CCATMFD658	2.24	1.59	1.33	3.62	3.49	4.79	6.24	7.84	9.59	11.49	13.54
39	CCATMFD668	3.44	3.45	2.91	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61
40	CCATMFD678	2.76	3.42	3.38	3.62	3.62	4.12	4.37	4.62	4.87	5.12	5.37
41	CCATMFD688	1.64	1.89	3.03	-0.17	-1.07	0.33	2.53	6.03	9.53	13.03	16.53
42	CCATMFD698	-77.09	-74.57	-83.02	-102.62	-120.52	-139.62	-155.32	-165.12	-174.92	-184.72	-194.52
43	CCATMFD708	61.91	70.10	67.16	84.56	110.56	135.46	154.66	171.16	187.66	204.16	221.52
44	CCATMFD718	-0.901	-2.389	-2.769	-1.468	-1.688	-1.473	-1.505	-0.690	-0.805	-0.811	-0.819
45	CCATMFD728	0.766	-0.328	-1.219	-0.498	0.147	-0.135	0.347	0.250	0.200	0.091	0.149
46	CCATMFD738	0.096	0.109	0.106	0.106	0.106	0.106	0.106	0.106	0.106	0.106	0.106
47	CCATMFD748	-0.577	-0.622	-0.612	-0.612	-0.612	-0.612	-0.612	-0.612	-0.612	-0.612	-0.612
48	CCATMFD758	-0.023	-0.044	-0.040	-0.040	-0.040	-0.040	-0.040	-0.040	-0.040	-0.040	-0.040
49	CCATMFD768	0.874	1.070	1.099	1.099	1.099	1.099	1.099	1.099	1.099	1.099	1.099
50	CCATMFD778	46.35	38.40	25.87	25.85	25.86	25.88	25.88	25.89	25.87	25.87	25.89
51	CCATMFD788	-4.91	-6.22	-6.23	-6.22	-6.23	-6.24	-6.24	-6.24	-6.23	-6.23	-6.24

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TABLE 45.10 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1970	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	HORIV	0.46	0.74	0.15	-0.60	-1.15	-1.10	-0.85	-0.60	-0.15	-0.10	0.15
2	HSPRSH	-119.14	-242.39	-179.04	-128.98	-78.96	-28.92	21.06	71.05	121.02	171.03	221.07
3	HSPRSH	-408.25	-470.58	-596.04	-900.52	-1100.16	-1307.23	-1510.49	-1650.14	-1670.52	-1690.15	-1739.41
4	HSPRS1	274.24	826.08	656.29	382.66	137.57	189.27	-19.81	96.90	190.32	220.55	137.17
5	IACG	-4.026	-2.665	-2.819	71.236	0.107	1.669	2.217	1.462	0.310	-1.309	-2.975
6	IACG	-2.018	-2.052	-1.451	11.270	-1.271	-1.271	-1.271	-1.271	-1.271	-1.271	-1.271
7	IAMFD24	-0.776	-0.730	-0.739	-0.739	-0.739	-0.739	-0.739	-0.739	-0.739	-0.739	-0.739
8	IAMFD25	-0.017	-0.008	-0.033	-0.043	-0.053	-0.063	-0.073	-0.083	-0.093	-0.103	-0.113
9	IAMFD12	0.019	0.082	0.303	0.393	0.303	0.303	0.303	0.303	0.303	0.303	0.303
10	IAMFD33	2.174	2.337	2.170	2.170	2.170	2.169	2.169	2.169	2.170	2.170	2.169
11	IAMFD14	-0.156	-0.014	-0.137	-0.172	-0.217	-0.275	-0.348	-0.443	-0.536	-0.630	-0.661
12	IAMFD15	0.390	0.414	0.330	0.261	0.230	0.180	0.130	0.080	0.030	-0.020	-0.070
13	IAMFD16	-1.089	-0.949	-1.002	-1.023	-1.043	-1.063	-1.083	-1.103	-1.123	-1.143	-1.163
14	IAMFD17SP2	-0.049	-0.203	-0.335	-0.335	-0.335	-0.339	-0.339	-0.335	-0.339	-0.339	-0.335
15	IAMFD171	-0.606	-0.684	-1.114	-1.417	-1.717	-2.017	-2.317	-2.617	-2.917	-3.217	-3.517
16	IAMFD18	-0.552	-0.612	-0.617	-0.641	-0.645	-0.689	-0.713	-0.737	-0.761	-0.785	-0.814
17	IAMFD20	0.647	0.094	-0.620	-0.920	-1.220	-1.320	-1.317	-1.317	-1.267	-1.217	-1.167
18	IAMFD22	-0.110	-0.154	-0.154	-0.157	-0.157	-0.157	-0.157	-0.157	-0.157	-0.157	-0.157
19	IAMFD23	-0.077	-0.088	-0.093	-0.101	-0.109	-0.117	-0.125	-0.133	-0.141	-0.149	-0.157
20	IAMFD26	0.545	0.517	0.477	0.480	0.480	0.480	0.480	0.480	0.480	0.480	0.480
21	IAMFD27	-0.081	-0.132	-0.134	-0.134	-0.134	-0.134	-0.134	-0.134	-0.134	-0.134	-0.134
22	IAMFD28	0.109	-0.805	-1.280	-1.139	-1.039	-0.940	-0.840	-0.740	-0.639	-0.539	-0.489
23	IAMFD29	2.640	3.130	3.055	3.135	3.135	3.135	3.135	3.055	3.055	3.055	3.055
24	IAMFD30	-1.020	-0.940	-1.057	-1.254	-1.254	-1.255	-1.255	-1.255	-1.254	-1.254	-1.255
25	IAMFD31	-0.015	-0.002	0.014	0.025	0.020	0.015	0.010	0.005	-0.000	-0.005	-0.010
26	IAMG	0.014	0.068	0.189	0.285	0.327	0.431	0.537	0.614	0.680	0.740	0.810
27	IARGC48	-5.978	-6.055	-5.487	-5.037	-5.037	-5.037	-5.037	-5.037	-5.037	-5.037	-5.037
28	IARGT	-2.339	-2.614	-3.274	-3.274	-3.274	-3.274	-3.274	-3.274	-3.274	-3.274	-3.274
29	IARGU49	-3.752	-3.708	-3.674	-3.773	-3.973	-4.173	-4.373	-4.573	-4.773	-4.973	-5.173
30	IAR	10.109	10.060	5.942	4.031	3.529	3.029	2.529	2.029	1.529	1.029	0.528
31	IBFRXNU-MH	1.393	2.991	3.236	2.774	2.774	2.774	2.774	2.774	2.774	2.774	2.774
32	IRINUM	-0.66	-1.51	0.33	0.41	0.68	0.94	1.21	1.47	1.74	2.00	2.26
33	IRITS	0.38	0.62	0.35	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
34	IP	0.00	-0.03	-0.05	0.01	-0.01	-0.02	-0.01	-0.02	-0.02	-0.01	-0.01
35	IPMF	0.00	0.01	0.00	0.00	-0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
36	IPMF D	-2.49	-1.43	-2.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	IPMFN	-2.09	-1.77	-2.39	-1.40	-1.50	-1.60	-1.70	-1.80	-1.90	-2.00	-2.10
38	IPMG	-0.21	-0.08	-3.15	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	IPMG+49	0.02	0.01	-0.00	0.00	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
40	IPRGU49	-8.33	-1.20	-0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	IVACS	12.59	17.61	17.44	18.44	19.44	20.44	21.44	22.44	23.44	24.44	25.44
42	IVALS	0.53	0.65	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
43	KHUM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	KHUI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	KHUI+KHU	-0.00	-0.00	-0.00	-0.10	-0.20	-0.30	-0.40	-0.50	-0.60	-0.70	-0.80
46	KHUI+KHUI+KH	0.00	0.00	0.00	-0.00	-0.15	-0.30	-0.45	-0.60	-0.75	-0.90	-1.05
47	KIBITAF	-4.62	-0.49	-12.65	-14.89	-14.93	-14.15	-12.71	-10.70	-8.55	-6.27	-3.99
48	KIBITAV	-0.22	-0.85	-1.25	-1.22	-1.16	-1.07	-0.95	-0.80	-0.62	-0.41	-0.20
49	KSAMRD4V	-3.338	-3.872	-4.331	-4.431	-4.231	-4.031	-3.831	-3.631	-3.431	-3.231	-3.031
50	NPV	-0.592	-0.620	-1.061	-1.242	-1.362	-1.562	-1.812	-2.082	-2.362	-2.662	-2.962
51	NCH/KHU	0.000	0.000	0.000	0.398	-0.608	-0.608	-0.668	-0.728	-0.788	-0.848	-0.908

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 45.10 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NEETICC	44.25	1.45	48.18	42.95	-145.10	-81.32	-41.11	-139.02	-62.54	-10.43	29.05
2	NEETIFT	51.98	-17.79	1.66	50.91	-34.29	-60.75	-39.30	-42.57	-18.42	-37.14	-34.58
3	NEETIGVF	-1.30	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.01	0.01	0.01	0.01
4	NEETIGVS	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
5	NEETIMFD19	13.70	2.70	-12.55	-8.04	-8.04	-7.24	-8.84	-5.84	-7.05	-7.05	-7.05
6	NEETIMFD24	35.51	16.44	11.12	21.11	22.31	23.31	25.71	26.31	27.81	30.21	31.61
7	NEETIMFD25	-26.95	-35.24	-43.99	-53.08	-63.02	-72.96	-82.90	-92.84	-107.78	-112.72	-117.66
8	NEETIMFD32	16.47	10.06	1.56	-5.94	-8.44	-10.94	-13.44	-15.94	-18.44	-20.94	-23.44
9	NEETIMFD33	62.35	41.18	24.57	19.57	14.57	9.57	4.57	0.43	5.43	10.43	15.43
10	NEETIMFD34	96.57	81.53	62.47	77.47	74.27	67.47	62.47	57.47	52.47	47.47	42.47
11	NEETIMFD35	-20.48	-55.54	-71.74	-113.39	-155.04	-179.69	-204.34	-228.99	-253.64	-278.29	-302.94
12	NEETIMFD36	118.63	155.21	181.94	182.28	186.77	191.26	195.75	200.24	204.73	209.22	213.71
13	NEETIMFD37SP1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	NEETIMFD37SP2	52.84	48.26	36.56	31.65	24.95	18.05	11.15	4.25	-2.65	-9.55	-16.45
15	NEETIMFD37SP3	-90.90	-80.61	-73.42	-59.46	-64.06	-68.66	-73.26	-77.86	-82.46	-87.06	-91.66
16	NEETIMFD372.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	NEETIMFD38	-12.76	-19.22	-27.33	-37.59	-47.32	-57.05	-66.78	-76.51	-86.24	-95.97	-105.70
18	NEETIMFD39	1.84	7.08	13.11	9.88	7.48	7.87	6.47	5.47	4.87	3.47	2.47
19	NEETIMFN20	30.48	-2.99	-2.26	-8.85	-15.48	-22.05	-28.63	-35.25	-41.83	-48.45	-55.05
20	NEETIMFN21	1.17	-0.95	-0.34	-0.54	-0.74	-0.93	-1.13	-1.33	-1.52	-1.72	-1.92
21	NEETIMFN22	56.24	55.60	53.66	50.66	43.66	40.66	33.66	30.66	23.66	20.66	13.66
22	NEETIMFN23	-89.49	-97.23	-106.51	-117.97	-129.43	-140.89	-152.35	-163.81	-175.27	-186.73	-198.19
23	NEETIMFN26	24.32	28.85	23.17	23.33	23.17	23.01	22.85	22.69	22.53	22.37	22.21
24	NEETIMFN27	5.33	4.16	-10.10	-23.60	-29.10	-29.10	-29.10	-29.10	-29.10	-29.10	-29.10
25	NEETIMFN28	21.90	22.12	23.03	8.93	12.59	16.25	19.91	23.57	27.23	30.89	34.55
26	NEETIMFN29	2.61	6.89	4.99	0.59	-0.01	-0.61	-1.21	-1.81	-2.41	-3.01	-3.61
27	NEETIMFN30	-19.17	-22.11	-23.48	-31.62	-34.96	-38.30	-41.64	-44.98	-48.32	-51.65	-54.98
28	NEETIMFN31	2.33	-0.71	-2.31	-6.57	-10.73	-14.89	-19.05	-23.21	-27.37	-31.53	-35.69
29	NEETIMG	49.42	41.34	5.79	-5.79	-5.79	-5.79	-5.79	-5.79	-5.79	-5.79	-5.79
30	NEETIMGC48	-127.04	-182.95	-188.21	-201.12	-176.42	-149.82	-123.22	-94.72	-73.12	-66.02	-76.12
31	NEETIMG49	26.60	91.23	91.26	88.43	83.06	80.46	78.36	77.16	73.26	66.02	76.12
32	NEETIMG49	3.48	7.74	-27.68	-20.95	-31.65	-10.35	-29.63	-29.15	-37.45	-40.00	-48.25
33	NEETISV	-127.98	111.25	-153.43	107.44	-214.82	-154.36	-116.68	-109.94	-164.20	-140.93	-126.98
34	NEETIMR	33.83	-62.38	-133.14	27.17	-161.91	-84.89	-33.80	-92.40	-59.27	1.57	54.35
35	NEHA	423.09	306.43	348.39	368.69	376.99	385.29	393.59	401.89	410.19	418.49	426.78
36	NNHNPFD24	0.0	0.0	0.0	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14
37	NNHNPFD25	0.0	0.0	0.0	-0.06	-0.12	-0.18	-0.24	-0.30	-0.36	-0.42	-0.48
38	NNHNPFD32	0.0	0.0	0.0	-0.09	-0.18	-0.27	-0.36	-0.45	-0.54	-0.63	-0.72
39	NNHNPFD33	0.0	0.0	0.0	-0.18	-0.26	-0.34	-0.42	-0.50	-0.58	-0.66	-0.74
40	NNHNPFD34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	NNHNPFD35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	NNHNPFD36	0.0	0.0	0.0	-0.15	-0.30	-0.45	-0.60	-0.75	-0.90	-1.05	-1.20
43	NNHNPFD37SP2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	NNHNPFD371	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	NNHNPFD38	0.0	0.0	0.0	-0.08	-0.16	-0.24	-0.32	-0.40	-0.48	-0.56	-0.64
46	NNHNPFD20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	NNHNPFD21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	NNHNPFD22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	NNHNPFD23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	NNHNPFD26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	NNHNPFD27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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TABLE 45.30 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NHNPWFN28	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.30	0.10	0.30	0.10
2	NHNPWFN29	0.0	0.0	0.0	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19
3	NHNPWFN30	0.0	0.0	0.0	-0.02	-0.05	-0.07	-0.10	-0.12	-0.14	-0.17	-0.19
4	NHNPWFN31	0.0	0.0	0.0	-0.07	-0.14	-0.22	-0.29	-0.36	-0.43	-0.50	-0.58
5	NHNPWFN32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.10
6	NHNPWFN33	0.0	0.0	0.0	-0.019	-0.036	-0.057	-0.076	-0.094	-0.113	-0.132	-0.151
7	NHNPWFN34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	NHNPWFN35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	NHNPWFN36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	NHNPWFN37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	NHNPWFN38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	NHNPWFN39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	NHNPWFN40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	NHNPWFN41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	NHNPWFN42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	NHNPWFN43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	NHNPWFN44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	NHNPWFN45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	NHNPWFN46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	NHNPWFN47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	NHNPWFN48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	NHNPWFN49	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	NHNPWFN50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	NHNPWFN51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	NHNPWFN52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	NHNPWFN53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	NHNPWFN54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	NHNPWFN55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	NHNPWFN56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	NHNPWFN57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	NHNPWFN58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	NHNPWFN59	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	NHNPWFN60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	NHNPWFN61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	NHNPWFN62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	NHNPWFN63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	NHNPWFN64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	NHNPWFN65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	NHNPWFN66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	NHNPWFN67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	NHNPWFN68	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	NHNPWFN69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	NHNPWFN70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	NHNPWFN71	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	NHNPWFN72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	NHNPWFN73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	NHNPWFN74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	NHNPWFN75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	NHNPWFN76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	NHNPWFN77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	NHNPWFN78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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TABLE 45.30 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1970	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NRLTF25.34	0.0896	0.0986	0.1149	0.1235	0.1239	0.1258	0.1271	0.1242	0.1209	0.1186	0.1185
2	NRLTF35.44	0.0174	0.0194	0.0214	0.0300	0.0306	0.0327	0.0342	0.0312	0.0278	0.0254	0.0253
3	NRLTF45.54	0.0062	0.0085	0.0090	0.0076	0.0080	0.0097	0.0110	0.0085	0.0056	0.0035	0.0035
4	NRLTF55.64	0.0220	0.0291	0.0357	0.0424	0.0497	0.0569	0.0577	0.0594	0.0606	0.0591	0.0550
5	NRLTF65+	0.0008	0.0008	0.0021	0.0024	0.0016	0.0010	0.0004	-0.0008	-0.0021	-0.0032	-0.0040
6	NRLTM16.19	0.0192	0.0106	0.0193	0.0235	0.0202	0.0203	0.0210	0.0204	0.0202	0.0210	0.0222
7	NRLTM20.24	0.0074	0.0057	0.0082	0.0116	-0.0023	-0.0023	-0.0017	-0.0019	-0.0022	-0.0019	-0.0015
8	NRLTM25.34	-0.0021	0.0024	0.0008	0.0021	0.0015	0.0016	0.0022	0.0020	0.0014	0.0017	0.0021
9	NRLTM35.44	-0.0000	0.0063	0.0093	-0.0015	-0.0021	-0.0020	-0.0014	-0.0016	-0.0020	-0.0018	-0.0014
10	NRLTM45.54	-0.0020	0.0066	0.0102	-0.0004	-0.0012	-0.0011	-0.0005	-0.0007	-0.0011	-0.0008	-0.0004
11	NRLTM55.64	-0.0195	-0.0021	0.0010	-0.0158	-0.0322	-0.0472	-0.0618	-0.0653	-0.0687	-0.0716	-0.0743
12	NRLTM65+	0.0105	0.0059	0.0080	0.0051	0.0046	0.0047	0.0050	0.0049	0.0050	0.0052	0.0054
13	NRUTF16.19	-0.079	0.007	-1.00	-0.01	-0.01	-0.01	-0.01	-1.62	-1.37	-0.93	-0.84
14	NRUTF20.24	-0.10	-0.23	-0.22	-0.79	-1.06	-1.05	-1.00	-1.04	-1.03	-0.95	-0.86
15	NRUTF25.34	-0.33	-0.34	-0.32	-0.66	-0.83	-0.83	-0.80	-0.81	-0.83	-0.78	-0.71
16	NRUTF35.44	-0.11	-0.07	-0.07	-0.30	-0.42	-0.42	-0.40	-0.43	-0.42	-0.39	-0.36
17	NRUTF45.54	0.01	0.10	0.10	-0.04	-0.15	-0.15	-0.14	-0.15	-0.15	-0.13	-0.10
18	NRUTF55.64	-0.43	-0.21	-0.22	-0.31	-0.36	-0.36	-0.36	-0.36	-0.36	-0.35	-0.33
19	NRUTF65+	-0.04	0.00	0.11	-0.12	-0.22	-0.22	-0.20	-0.22	-0.22	-0.19	-0.16
20	NRUTM16.19	-1.36	-1.31	-1.30	-1.41	-1.91	-1.55	-1.13	-0.88	-0.54	-0.05	0.47
21	NRUTM20.24	-0.94	-1.13	-1.18	-1.09	-0.96	-0.78	-0.60	-0.43	-0.25	-0.05	0.16
22	NRUTM25.34	2.23	2.39	2.49	1.80	1.30	1.07	0.86	0.58	0.35	0.19	0.02
23	NRUTM35.44	1.43	1.57	1.80	0.98	0.62	0.45	0.29	0.08	-0.09	-0.22	-0.15
24	NRUTM45.54	1.35	1.42	1.18	0.70	0.35	0.17	0.01	-0.20	-0.36	-0.49	-0.63
25	NRUTM55.64	-0.09	0.00	-0.01	-0.06	-0.09	-0.09	-0.09	-0.10	-0.10	-0.09	-0.08
26	NRUTM65+	0.89	0.88	0.90	0.69	0.58	0.58	0.59	0.57	0.57	0.59	0.62
27	NRUTF16.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	NRUTF20.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	NRUTF25.34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	NRUTF35.44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	NRUTF45.54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	NRUTF55.64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	NRUTF65+	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	NRUTM16.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	NRUTM20.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	NRUTM25.34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	NRUTM35.44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	NRUTM45.54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	NRUTM55.64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	NRUTM65+	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1970

TABLE 45.40 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1970	1971	1972	1973	1974	1975	1976	1977	1978
1	PC	0.42	1.32	0.90	0.00	0.00	0.00	0.00	0.00	0.00
2	PCCF	-1.05	-1.70	0.45	0.00	0.00	0.00	0.00	0.00	0.00
3	PCS	0.90	4.25	4.40	0.00	0.00	0.00	0.00	0.00	0.00
4	PCSR	2.69	4.69	4.33	0.00	0.00	0.00	0.00	0.00	0.00
5	PCCDAP	10.32	0.55	2.58	2.62	2.90	2.92	2.78	2.70	2.52
6	PCCDAVN	-0.59	-0.25	-7.21	-9.68	-15.51	-31.41	-39.54	-45.62	-51.78
7	PCCDAVR+T	-0.59	-0.25	-7.21	-9.68	-15.51	-31.41	-39.54	-45.62	-51.78
8	PCCDAVU	-6.44	-5.63	7.02	-14.90	-50.01	-67.83	-86.00	-104.22	-122.35
9	PCCDF	-2.42	-3.51	4.76	-4.72	-4.56	-4.47	-4.59	-4.66	-4.81
10	PCCDO	0.31	-0.23	0.97	2.14	3.23	4.35	5.41	6.46	7.58
11	PCCENC	-1.02	-4.25	-5.09	-5.54	-5.38	-5.29	-5.41	-5.48	-5.63
12	PCCNF	2.19	4.66	6.13	5.88	5.40	4.04	3.38	2.78	2.06
13	PCCNG	-2.19	-2.35	-0.73	5.27	8.27	11.27	14.27	17.27	20.27
14	PCCND+H	-1.59	-4.72	-6.45	-7.40	-9.09	-11.07	-12.23	-13.32	-14.52
15	PCCFSH	2.37	5.00	8.68	10.95	13.14	15.24	17.37	19.25	21.09
16	PCCSO	-0.28	-1.52	-1.96	-1.69	-1.55	-1.39	-1.70	-1.81	-2.04
17	PCCSS	2.71	3.34	3.91	4.90	5.83	6.77	7.74	8.58	11.44
18	PCCST	0.71	-0.20	-0.53	-0.46	-0.25	-0.13	-0.27	-0.38	-0.60
19	PDGVFF	0.10	-0.73	-0.99	-0.95	-0.75	-0.64	-0.49	-0.66	-1.06
20	PDGVPS	0.52	0.22	-0.39	-2.32	-4.12	-6.00	-7.84	-9.61	-11.06
21	PDIFR	-0.49	-0.70	-2.14	-2.09	-1.76	-1.59	-1.73	-1.90	-1.86
22	PDIFR	7.25	15.16	22.96	28.03	33.29	36.43	40.45	53.24	62.05
23	PDIFRSMNH	6.83	6.57	5.53	3.35	3.34	3.34	3.34	3.34	3.34
24	PDIFRTHD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	PDIFRTHD	3.07	2.64	2.80	1.80	1.30	0.80	-0.20	-0.70	-1.20
26	PDYN	-0.04	-0.02	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07
27	PDIERS+OTH	-2.60	-10.17	-28.04	-28.04	-28.04	-28.04	-28.04	-28.04	-28.04
28	PTEGDCM	-26.54	-15.66	-0.08	-8.01	-7.70	-7.51	-7.72	-7.87	-8.21
29	PTEGDF	-4.51	-13.94	-20.80	-20.80	-20.45	-20.29	-20.42	-20.59	-19.40
30	PTEGDM	2.49	9.30	13.19	11.26	9.53	7.68	5.80	4.61	2.89
31	PTEFUEL	-10.48	-11.83	-16.07	-15.94	-15.30	-15.01	-15.24	-15.72	-16.16
32	PUNSPRHH	-0.1100	-0.2053	-0.1435	-0.5425	-1.2428	-1.6917	-2.3226	-3.1326	-3.9809
33	PUNSPRSM	-1.3554	-1.8562	-2.3393	-2.8193	-3.2594	-4.7394	-5.2195	-5.6524	-6.0784
34	PUNSPRSI	0.3518	0.4434	0.1713	0.0879	0.0139	-0.4263	-0.9226	-1.1809	-1.3443
35	PURGX	0.21	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18
36	PM	-0.13	-0.10	-0.42	-0.42	-0.42	-0.42	-0.42	-0.42	-0.42
37	PMDF	0.49	0.04	-0.93	0.00	0.00	0.00	0.00	0.00	0.00
38	PMPC	-1.57	3.63	0.23	0.00	0.00	0.00	0.00	0.00	0.00
39	PMPE	0.41	0.41	0.39	0.00	0.00	0.00	0.00	0.00	0.00
40	PMPE	2.10	3.70	1.66	0.00	0.00	0.00	0.00	0.00	0.00
41	PMPE	-0.30	2.56	1.80	0.00	0.00	0.00	0.00	0.00	0.00
42	PMPI	1.46	0.68	1.56	0.00	0.00	0.00	0.00	0.00	0.00
43	PXVGG	-24.71	-53.21	-64.25	-90.10	-111.43	-129.33	-145.94	-161.56	-175.50
44	PXVCC	-0.68	-5.58	-6.39	-6.39	-6.39	-6.39	-6.39	-6.39	-6.39
45	PXVGVFE	-19.64	-30.68	-56.20	-79.76	-105.85	-135.74	-167.44	-198.69	-229.19
46	PXVGVSE	-2.55	-7.24	-9.53	-11.53	-12.53	-13.53	-14.53	-15.53	-16.53
47	PXVGF24	-10.72	-20.22	-26.26	-34.25	-40.25	-45.25	-53.85	-60.35	-66.85
48	PXVGF25	16.42	14.87	14.10	14.11	14.11	14.11	14.11	14.11	14.11
49	PXVGF32	21.54	20.74	16.58	16.58	16.58	16.58	16.58	16.58	16.58
50	PXVGF33	-5.60	-6.47	-9.99	-9.99	-9.99	-9.99	-9.99	-9.99	-9.99
51	PXVGF34	12.21	9.56	-9.07	-9.07	-9.07	-9.07	-9.07	-9.07	-9.07

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 45.40 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1970	1971	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	PXVGMF03	8.06	7.66	9.03	10.03	11.03	12.03	13.03	14.03	15.03	16.03	17.03
2	PXVGMF03	13.91	15.43	10.77	21.77	24.77	27.77	30.77	31.77	36.77	39.77	42.77
3	PXVGMF03	11.46	11.74	14.49	16.16	17.86	19.51	21.17	22.77	24.38	26.03	27.78
4	PXVGMF03	9.51	9.92	12.61	14.61	16.61	18.61	20.61	22.61	24.61	26.61	28.61
5	PXVGMF03	11.68	14.21	17.42	19.92	22.42	24.92	27.42	29.92	32.42	34.92	37.42
6	PXVGMF03	-8.38	-11.78	-13.39	-13.39	-13.39	-13.39	-13.39	-13.39	-13.39	-13.39	-13.39
7	PXVGMF03	2.43	4.51	7.55	10.44	14.69	19.06	23.43	27.74	32.07	36.43	40.87
8	PXVGMF03	-1.54	-1.84	-3.49	-3.48	-3.48	-3.48	-3.48	-3.48	-3.48	-3.48	-3.48
9	PXVGMF03	7.05	14.67	18.19	22.19	26.19	30.19	34.19	38.19	42.19	46.19	50.19
10	PXVGMF03	9.65	11.52	10.10	10.09	10.09	10.09	10.09	10.09	10.09	10.09	10.09
11	PXVGMF03	5.00	3.70	1.99	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
12	PXVGMF03	20.10	19.43	24.18	26.18	28.18	30.18	32.18	34.18	36.18	38.18	40.18
13	PXVGMF03	10.42	9.04	1.04	1.03	1.05	1.05	1.05	1.05	1.05	1.05	1.05
14	PXVGMF03	4.33	10.99	11.06	13.06	15.06	17.06	19.06	21.06	23.06	25.06	27.06
15	PXVGMF03	1.33	0.73	-3.76	-4.76	-5.76	-6.76	-7.76	-8.76	-9.76	-10.76	-11.76
16	PXVGMF03	2.09	-0.37	-5.52	-7.53	-9.53	-11.53	-13.53	-15.53	-17.53	-19.53	-21.53
17	PXVGMF03	-1.04	-2.42	-2.70	-2.70	-2.70	-2.70	-2.70	-2.70	-2.70	-2.70	-2.70
18	PXVGMF03	-1.22	-4.24	-7.10	-10.38	-13.58	-16.78	-19.98	-23.18	-26.38	-29.58	-32.78
19	PXVGMF03	11.25	15.26	22.88	31.88	40.88	49.88	58.88	67.88	76.88	85.88	94.88
20	PXVGMF03	2.50	0.44	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
21	PXVGMF03	1.02	1.02	2.08	2.24	3.64	5.71	7.46	9.34	11.09	12.71	13.06
22	PXVGMF03	37.03	38.81	35.53	39.66	43.23	47.12	51.36	55.98	61.02	66.51	72.50
23	PXVGMF03	24.72	40.11	77.90	110.90	143.90	175.90	201.90	223.90	245.90	266.90	287.90
24	PXVGMF03	0.0005	-0.0017	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053	-0.0053
25	PXVGMF03	0.036	0.010	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040
26	PXVGMF03	0.102	0.111	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114
27	PXVGMF03	-15.10	-4.16	9.23	19.28	28.50	36.78	44.18	50.72	56.40	61.14	65.92
28	PXVGMF03	0.49	0.16	0.91	1.31	1.71	2.11	2.51	2.91	3.31	3.71	4.11
29	PXVGMF03	-0.09	-0.25	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26
30	PXVGMF03	0.91	1.52	1.44	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
31	PXVGMF03	9.19	6.40	-0.69	-12.34	-27.70	-43.39	-61.89	-82.29	-99.44	-114.52	-131.55
32	PXVGMF03	1.11	-0.10	-2.40	-2.40	-2.40	-2.40	-2.40	-2.40	-2.40	-2.40	-2.40
33	PXVGMF03	0.93	15.33	18.44	21.90	25.69	29.65	33.58	37.50	41.36	45.18	48.97
34	PXVGMF03	-2.51	-10.29	-13.47	-14.47	-15.47	-16.47	-17.47	-18.47	-19.47	-20.47	-21.47
35	PXVGMF03	0.61	1.00	2.42	2.92	3.42	3.92	4.42	4.92	5.42	5.92	6.42
36	PXVGMF03	0.51	0.01	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
37	PXVGMF03	-0.09	0.20	0.23	0.13	0.03	-0.07	-0.17	-0.27	-0.37	-0.47	-0.57
38	PXVGMF03	-0.05	-0.02	-3.44	-5.44	-7.44	-9.44	-11.44	-13.44	-15.44	-17.44	-19.44
39	PXVGMF03	0.27	-1.00	-1.60	-1.60	-1.00	-0.81	-0.81	-0.81	-0.81	-0.81	-0.81
40	PXVGMF03	6.00	6.53	2.96	-0.49	-3.20	-6.62	-10.31	-14.52	-19.24	-24.49	-29.04
41	PXVGMF03	-2.21	-3.17	-4.10	-4.10	-4.10	-4.10	-4.10	-4.10	-4.10	-4.10	-4.10
42	PXVGMF03	-1.97	-5.37	-7.33	-11.82	-12.82	-13.82	-14.82	-15.82	-16.82	-17.82	-18.82
43	PXVGMF03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	PXVGMF03	-18.36	-20.45	-33.91	-40.54	-48.49	-57.99	-69.36	-82.95	-98.21	-113.66	-129.00
45	PXVGMF03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	PXVGMF03	1.46	-0.94	-2.70	-1.80	-0.80	-0.80	-0.80	-0.80	-0.80	-0.80	-0.80
47	PXVGMF03	-0.82	-0.87	-1.42	-2.02	-2.62	-3.22	-3.82	-4.42	-5.02	-5.62	-6.22
48	PXVGMF03	-0.91	-5.14	-8.73	-9.46	-10.55	-11.64	-12.73	-13.82	-14.91	-16.00	-17.09
49	PXVGMF03	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	PXVGMF03	-0.00	0.00	-0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
51	PXVGMF03	-4.28	-5.86	-12.03	-13.03	-14.03	-15.03	-16.03	-17.03	-18.03	-19.03	-20.03

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POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 45.40 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IXCS31A	4.56	5.44	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09
2	IXOPDVIPIR	0.18	-0.51	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05
3	IXOPDIEN	9.724	7.953	4.814	3.814	2.814	1.814	0.814	-0.186	-1.186	-2.186	-3.186
4	IXOPDIEN	-1.941	-1.781	-0.480	-0.480	-0.480	-0.480	-0.480	-0.480	-0.480	-0.480	-0.480
5	IXOPDIY1	-0.0108	-0.0105	-0.0076	-0.0056	-0.0036	-0.0016	0.0004	0.0024	0.0044	0.0064	0.0084
6	IXOPDIY2	-0.0082	-0.0082	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076	-0.0076
7	IXOPDIY3	0.0075	-0.0035	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040	-0.0040
8	IXOPDIY4	0.0004	0.0002	0.0010	0.0034	0.0064	0.0094	0.0124	0.0154	0.0184	0.0214	0.0244
9	IXOPDIY5	-0.0032	0.0030	-0.1051	-0.1370	-0.1639	-0.1908	-0.2177	-0.2446	-0.2715	-0.2984	-0.3253
10	IXOPDIY6	-0.0136	-0.0178	-0.0190	-0.0206	-0.0222	-0.0238	-0.0254	-0.0270	-0.0286	-0.0302	-0.0318
11	IXOPDIY7	-0.0043	-0.0071	-0.0137	-0.0206	-0.0274	-0.0342	-0.0410	-0.0478	-0.0546	-0.0614	-0.0682
12	IXOPDIYA	-0.0077	-0.0036	-0.1044	-0.1349	-0.1774	-0.2231	-0.2720	-0.3247	-0.3752	-0.4221	-0.4668
13	IXOPDIY8	-2.13	-3.10	-1.66	-2.26	-2.86	-3.45	-4.05	-4.65	-5.25	-5.85	-6.44
14	IXOPDIY9	0.350	0.050	0.562	0.561	0.561	0.561	0.561	0.561	0.561	0.561	0.561
15	IXOPDIY10	-4.800	-4.789	-7.785	-6.656	-7.063	-6.900	-6.494	-5.452	-4.521	-3.601	-2.681
16	IXOPDIY11	-38.204	-34.772	-69.665	-91.585	-116.048	-142.756	-171.014	-201.395	-232.529	-265.398	-300.362
17	IXOPDIY12	-4.531	-0.260	-14.000	-12.819	-11.879	-10.879	-9.879	-8.879	-7.879	-6.879	-5.879
18	IXOPDIY13	-0.007	-0.066	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027	-0.027
19	IXOPDIY14	-0.007	0.104	0.087	0.117	0.130	0.143	0.156	0.169	0.182	0.195	0.208
20	IXOPDIY15	-0.047	-0.017	-0.049	-0.059	-0.059	-0.059	-0.059	-0.059	-0.059	-0.059	-0.059
21	IXOPDIY16	0.049	0.172	0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131
22	IXOPDIY17	-0.187	-0.086	-0.034	-0.086	-0.086	-0.086	-0.086	-0.086	-0.086	-0.086	-0.086
23	IXOPDIY18	0.264	0.049	0.031	0.081	0.081	0.081	0.081	0.081	0.081	0.081	0.081
24	IXOPDIY19	-0.207	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
25	IXOPDIY20	-0.028	0.008	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
26	IXOPDIY21	-1.012	-0.976	-1.073	-1.173	-1.173	-1.173	-1.173	-1.173	-1.173	-1.173	-1.173
27	IXOPDIY22	0.083	0.061	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082
28	IXOPDIY23	0.279	0.123	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027
29	IXOPDIY24	-0.109	-0.089	-0.070	-0.090	-0.090	-0.090	-0.090	-0.090	-0.090	-0.090	-0.090
30	IXOPDIY25	-0.135	-0.137	-0.128	-0.133	-0.133	-0.133	-0.133	-0.133	-0.133	-0.133	-0.133
31	IXOPDIY26	-0.316	-0.209	-0.324	-0.390	-0.390	-0.390	-0.390	-0.390	-0.390	-0.390	-0.390
32	IXOPDIY27	0.137	0.155	0.096	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078
33	IXOPDIY28	-0.043	0.174	0.080	0.090	0.100	0.110	0.120	0.130	0.140	0.150	0.160
34	IXOPDIY29	0.300	0.358	0.320	0.387	0.407	0.427	0.447	0.467	0.487	0.507	0.527
35	IXOPDIY30	-0.350	0.036	0.020	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
36	IXOPDIY31	0.083	0.116	0.096	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097
37	IXOPDIY32	0.345	0.182	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148
38	IXOPDIY33	-12.838	-8.155	-12.769	-13.670	-14.570	-15.470	-16.370	-17.270	-18.170	-19.070	-19.970
39	IXOPDIY34	2.452	-7.251	-2.303	-3.544	-2.785	-2.024	-1.264	-0.504	0.255	1.015	1.775
40	IXOPDIY35	-0.741	-6.795	-4.256	-6.436	-5.616	-4.796	-3.976	-3.156	-2.336	-1.516	-0.696
41	IXOPDIY36	-4.33	-4.66	-7.79	-4.24	-3.14	-2.04	-0.94	0.16	1.16	2.16	3.16
42	IXOPDIY37	0.31	0.07	-0.00	0.84	1.70	2.55	3.40	4.25	5.10	5.95	6.80
43	IXOPDIY38	-0.50	0.82	0.74	1.24	1.75	2.25	2.75	3.25	3.75	4.25	4.75
44	IXOPDIY39	1.03	0.88	0.82	1.02	1.22	1.42	1.62	1.82	2.02	2.22	2.42
45	IXOPDIY40	-0.49	-0.84	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22
46	IXOPDIY41	-0.32	-0.70	-0.80	-0.80	-0.80	-0.80	-0.80	-0.80	-0.80	-0.80	-0.80
47	IXOPDIY42	0.42	0.92	1.34	1.54	1.74	1.94	2.14	2.34	2.54	2.74	2.94
48	IXOPDIY43	-0.07	0.09	0.29	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
49	IXOPDIY44	0.15	0.66	1.36	1.41	1.47	1.53	1.59	1.65	1.71	1.77	1.84
50	IXOPDIY45	0.17	1.12	2.39	2.69	2.99	3.28	3.58	3.88	4.18	4.48	4.78

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 POST-MEETING CONTROL SOLUTION - DECEMBER 6, 1978

TABLE 45.40 CONSTANT ADJUSTMENTS

LINE	VAN LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	XVGMFO14	0.38	0.38	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
2	XVGMFO15	0.43	1.49	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.64	2.64
3	XVGMFO16	0.79	1.03	1.11	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
4	XVGMFO17SP1	0.04	0.07	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
5	XVGMFO17I	1.34	2.26	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17
6	XVGMFO18	0.19	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
7	XVGMFO19	0.20	-0.09	-0.17	-0.12	-0.07	-0.02	0.03	0.08	0.13	0.18	0.23
8	XVGMFO20	1.08	1.74	1.33	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64
9	XVGMFO21	0.12	-0.25	-0.33	-0.33	-0.33	-0.33	-0.33	-0.33	-0.33	-0.33	-0.33
10	XVGMFO22	0.48	-0.76	-1.13	-1.23	-1.23	-1.23	-1.23	-1.23	-1.23	-1.23	-1.23
11	XVGMFO23	0.22	-0.04	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26
12	XVGMFO26	0.05	0.32	0.34	0.45	0.55	0.65	0.75	0.85	0.95	1.05	1.15
13	XVGMFO27	0.42	1.00	1.02	1.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02
14	XVGMFO28	0.22	0.12	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
15	XVGMFO29	0.28	-0.14	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05
16	XVGMFO30	0.32	-0.19	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07
17	XVGMFO31	0.03	-0.04	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08
18	XVGMFO10	0.03	0.18	0.18	0.27	0.36	0.45	0.54	0.63	0.72	0.81	0.90
19	XVGMFO11+12	0.39	0.69	0.94	1.17	1.41	1.65	1.89	2.13	2.37	2.61	2.85
20	XVGMFO13	3.21	4.47	5.34	6.27	7.19	8.11	9.03	9.95	10.87	11.79	12.71
21	XVGMFO14	0.33	0.58	0.90	1.01	1.12	1.23	1.34	1.45	1.56	1.67	1.78
22	XVGMFO15A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	XVGMFO16A	0.03	-0.07	-0.17	-0.19	-0.22	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24
24	XVGMFO17A	0.03	-0.65	-1.34	-0.08	-1.00	-3.90	-5.53	-6.73	-7.63	-8.39	-8.99
25	XVGMFO18A	0.57	-0.61	-0.53	-0.43	-0.33	-0.23	-0.13	-0.03	0.07	0.17	0.27
26	XVGMFO19A	0.50	-0.58	-0.61	-0.55	-0.49	-0.43	-0.37	-0.31	-0.25	-0.19	-0.13
27	XVGMFO20A	0.00	-0.27	-0.01	-1.09	-1.37	-1.65	-1.93	-2.21	-2.49	-2.77	-3.05
28	XVGMFO21A	0.04	-0.10	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24
29	XVGMFO22A	0.47	-0.02	-1.27	-1.30	-1.33	-1.36	-1.39	-1.42	-1.45	-1.48	-1.51
30	XVGMFO23A	0.12	-0.18	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27
31	XVGMFO24A	0.06	0.08	0.09	0.13	0.17	0.21	0.25	0.29	0.33	0.37	0.41
32	XVGMFO25A	1.38	2.23	3.58	5.30	6.90	8.30	9.68	11.58	13.68	15.98	18.28
33	XVGMFO26A	0.54	-2.21	-2.29	-2.80	-3.30	-3.79	-4.29	-4.79	-5.29	-5.79	-6.29
34	XVGMFO27A	1.33	-5.08	-7.63	-7.63	-7.43	-7.22	-7.02	-6.82	-6.62	-6.41	-6.21
35	XVGMFO28A	2.15	2.61	0.03	1.55	2.28	3.00	3.72	4.45	5.17	5.89	6.61
36	XVGMFO29A	-3.50	-9.34	-4.97	-4.05	-4.72	-4.60	-4.48	-4.36	-4.24	-4.12	-3.99
37	XVGMFO30A	0.72	1.63	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
38	XVGMFO31A	10.04	17.54	13.67	19.17	24.67	30.17	35.67	41.17	46.67	52.17	57.67
39	XVGMFO32A	0.745	1.616	2.809	3.064	3.404	3.569	3.647	3.845	3.914	4.001	4.045

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APPENDIX IV

WHARTON ANNUAL MODEL

HIGHER PRODUCTIVITY ALTERNATIVE



QUARTERLY ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

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TABLE 1.00 SELECTED INDICATORS

LINE	VAR LABEL	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GDP	2105.7	2306.1	2509.9	2805.0	3131.2	3463.8	3793.7	4175.6	4533.5	4888.1	5239.0	5588.1	5939.0
2	GDP	11.6	9.6	8.7	11.8	11.6	10.6	9.5	10.1	8.6	7.8	7.2	6.6	6.0
3	GDP	1304.3	1416.7	1514.2	1581.0	1637.7	1685.9	1750.7	1803.6	1855.4	1905.3	1955.3	2005.3	2055.3
4	GDP	3.9	2.3	2.3	4.5	4.4	3.6	2.9	3.8	3.0	2.9	2.7	2.6	2.5
5	GDP	152.1	162.9	173.2	185.3	198.1	211.5	225.0	238.5	251.4	263.5	275.0	286.5	298.0
6	GDP	7.4	7.1	6.3	7.0	6.9	6.8	6.4	6.0	5.4	4.8	4.4	4.0	3.6
7	GDP	210.5	220.3	222.2	224.2	226.4	228.6	230.7	232.9	235.1	237.3	239.4	241.5	243.6
8	GDP	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9
9	GDP	100.3	102.7	104.8	106.9	107.9	109.5	111.0	112.5	114.0	115.5	117.0	118.5	120.0
10	GDP	3.0	2.4	2.0	1.5	1.4	1.4	1.3	1.4	1.4	1.4	1.5	1.5	1.5
11	GDP	63.0	63.6	64.0	64.1	64.3	64.6	64.8	65.1	65.3	65.6	66.0	66.3	66.6
12	GDP	1.3	0.9	0.6	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
13	GDP	94.2	96.3	98.0	100.6	103.0	105.0	106.6	108.2	109.8	111.4	113.0	114.6	116.2
14	GDP	4.1	2.3	1.8	2.6	2.4	1.9	1.5	1.5	1.3	1.2	1.2	1.2	1.2
15	GDP	265.1	286.1	306.6	331.5	350.7	387.9	418.4	450.8	482.8	514.5	546.5	578.5	610.5
16	GDP	8.2	7.9	7.1	8.1	8.2	8.1	7.9	7.8	7.1	6.6	6.2	5.7	5.2
17	GDP	14.6	14.6	14.7	15.0	15.3	15.5	15.8	16.1	16.4	16.7	17.0	17.3	17.6
18	GDP	-0.2	0.1	0.5	1.8	2.0	1.6	1.4	2.3	1.7	1.6	1.5	1.4	1.3
19	GDP	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.6	9.8	10.0	10.2	10.4
20	GDP	2.5	2.1	2.4	3.8	3.6	2.8	2.6	3.3	2.6	2.6	2.6	2.6	2.6
21	GDP	6.3	6.4	6.5	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6
22	GDP	3.0	1.5	1.4	3.5	3.4	2.6	2.0	2.9	2.1	1.9	1.8	1.7	1.6
23	GDP	4.0	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5.0	5.1	5.2
24	GDP	3.3	2.4	2.4	2.9	2.9	2.5	2.1	2.7	2.2	2.0	1.9	1.8	1.7
25	GDP	202.6	212.1	230.4	262.6	282.6	327.8	365.2	390.7	439.5	472.4	500.6	528.4	556.2
26	GDP	16.5	4.7	8.6	22.6	22.6	16.0	11.4	7.0	12.5	7.5	6.0	5.5	5.0
27	GDP	9.0	9.7	9.6	9.7	9.6	9.5	9.4	9.3	9.2	9.1	9.0	8.9	8.8
28	GDP	8.0	10.0	8.6	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.8
29	GDP	976.2	1061.3	1152.3	1248.6	1343.7	1439.2	1534.7	1630.2	1725.7	1821.2	1916.7	2012.2	2107.7
30	GDP	10.8	8.7	8.6	11.8	12.0	12.2	11.2	10.3	9.4	8.5	7.6	6.7	5.8
31	GDP	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2
32	GDP	5.4	6.0	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7
33	GDP	31.0	32.9	33.7	34.6	35.5	36.4	37.3	38.2	39.1	40.0	40.9	41.8	42.7
34	GDP	27.1	22.9	23.7	24.6	25.5	26.4	27.3	28.2	29.1	30.0	30.9	31.8	32.7
35	GDP	76.4	76.8	77.0	76.0	75.3	74.3	73.3	72.3	71.3	70.3	69.3	68.3	67.3
36	GDP	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0

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CHARLOTTE APRIAL AND INDUSTRY FORECASTING MODEL  
 PEPPER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 2.00 GROSS NATIONAL PRODUCT (CURRENT AND 72\$)

LINE VAR LABEL	T T F M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	-----CURRENT DOLLARS-----											
2												
3												
4 GNP\$	I	2105.712308.1	2509.9	2805.0	3131.2	3463.8	3793.7	4175.6	4533.5	4888.3	5239.0	
5 GNP\$	I	11.61	9.6	8.7	11.8	11.5	10.6	9.5	10.1	8.6	7.8	7.2
6	% CHANGE											
7 CES	I	1336.511465.4	1590.3	1774.7	1962.2	2161.2	2364.4	2585.8	2800.2	3016.4	3229.6	
8 CES	I	10.81	9.6	9.1	11.0	10.6	10.1	9.4	9.4	8.3	7.7	7.1
9	% CHANGE											
10 CED\$	I	195.81	209.7	228.3	256.3	284.9	313.2	340.7	375.1	404.4	433.8	460.1
11 CED\$	I	9.81	7.1	8.8	12.3	11.2	9.9	8.8	10.1	7.8	7.3	6.0
12	% CHANGE											
13 CEN\$	I	521.91	572.1	618.4	677.9	740.4	806.5	873.2	944.4	1013.9	1082.4	1149.2
14 CEN\$	I	9.81	9.2	8.1	9.6	9.2	8.9	8.3	8.2	7.4	6.8	6.2
15	% CHANGE											
16 CES\$	I	616.81	683.6	752.6	840.5	936.9	1041.5	1150.5	1266.3	1381.9	1500.2	1620.4
17 CES\$	I	12.31	10.8	10.1	11.7	11.5	11.2	10.5	10.1	9.1	8.6	8.0
18	% CHANGE											
19 IPT\$	I	345.71	362.0	388.8	467.4	557.6	631.1	695.9	787.8	852.8	917.0	977.6
20 IPT\$	I	16.11	4.7	7.4	20.2	19.3	13.2	10.3	13.2	8.3	7.5	6.6
21	% CHANGE											
22 IFS\$	I	328.71	350.7	378.1	446.4	527.2	596.7	659.2	745.6	809.2	872.2	931.4
23 IFS\$	I	16.51	6.7	7.8	18.1	18.1	13.2	10.5	13.1	8.5	7.8	6.8
24	% CHANGE											
25 IFR\$	I	222.41	247.4	269.8	317.3	370.6	420.5	466.4	518.4	560.1	611.3	666.8
26 IFR\$	I	16.81	11.3	9.0	17.6	16.8	13.4	10.9	11.1	8.0	9.1	9.1
27	% CHANGE											
28 IFR\$	I	106.41	103.3	108.3	129.1	156.6	176.2	192.9	227.3	249.2	260.9	264.6
29 IFR\$	I	15.81	-2.9	4.9	19.2	21.3	12.5	9.4	17.8	9.6	4.7	1.4
30	% CHANGE											
31 IBTS	B	17.01	11.2	10.7	21.0	30.3	34.4	36.6	42.1	43.6	44.8	46.1
32	% CHANGE											
33 TAB\$	I	-9.91	6.0	10.5	2.6	-4.1	-4.4	-6.4	-4.7	4.9	9.5	13.9
34	% CHANGE											
35 TE\$	I	206.41	253.0	283.3	316.1	350.9	390.3	429.0	480.2	537.6	595.9	654.7
36 TE\$	I	17.61	22.6	12.0	11.6	11.0	11.2	9.9	11.9	12.0	10.9	9.9
37	% CHANGE											
38 TMS\$	I	216.31	246.9	272.8	313.5	355.0	394.7	435.4	484.9	532.7	586.4	640.8
39 TMS\$	I	15.91	14.2	10.5	14.9	13.2	11.2	10.3	11.4	9.8	10.1	9.3
40	% CHANGE											
41 GVP\$	I	833.41	874.7	911.3	960.3	1015.5	1075.9	1139.8	1206.8	1275.6	1345.3	1418.0
42 GVP\$	I	10.01	9.5	7.7	9.6	9.0	9.8	9.5	9.1	8.5	8.0	7.7
43	% CHANGE											
44 GVP\$	I	153.31	167.8	181.0	198.0	216.3	235.6	256.0	277.1	298.3	320.0	342.1
45 GVP\$	I	5.71	9.5	7.8	9.4	9.2	8.9	8.6	8.2	7.7	7.3	6.9
46	% CHANGE											
47 GVP\$	I	280.11	306.9	330.3	362.2	399.2	440.2	483.8	529.8	577.3	625.3	675.9
48 GVP\$	I	12.51	9.0	7.6	9.7	10.2	10.3	9.9	9.5	9.0	8.3	8.1
	% CHANGE											

A PRODUCT OF CHARLOTTE, I.C., 3624 WOOD ST, PUEBLO, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

CHARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 2.00 GROSS NATIONAL PRODUCT (CURRENT AND 72S)

LINE VAR LABEL	J T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	CONSTANT 72 DOLLARS											
2												
3												
4 GNP		1384.3	1416.7	1449.2	1514.2	1581.0	1637.7	1685.9	1750.7	1803.6	1855.4	1905.3
5 GNP		5.9	2.3	2.3	4.5	4.4	3.6	2.9	3.8	3.0	2.9	2.7
6												
7 CF		888.9	919.9	933.5	969.5	1005.1	1040.0	1072.9	1111.6	1146.3	1181.3	1214.6
8 CF		3.0	2.5	2.5	3.9	3.7	3.5	3.2	3.6	3.1	3.1	2.8
9												
10 GDP		143.3	144.7	149.6	158.7	167.9	175.9	182.9	193.1	200.5	207.6	213.2
11 GDP		4.0	1.0	3.4	6.1	5.8	4.8	4.0	5.6	3.8	3.6	2.7
12												
13 CFN		337.9	346.7	354.3	366.2	376.9	387.2	396.7	407.5	417.8	428.3	438.5
14 CFN		2.3	2.6	2.2	3.4	2.9	2.8	2.4	2.7	2.5	2.5	2.4
15												
16 CFS		407.6	419.4	429.6	444.6	460.4	476.9	493.4	511.0	528.0	545.3	562.8
17 CES		4.7	2.9	2.4	3.5	3.6	3.6	3.4	3.6	3.3	3.3	3.2
18												
19 IAT		210.8	202.7	203.1	227.0	252.3	266.6	275.1	292.4	298.5	304.5	309.2
20 IAT		7.0	-3.8	0.2	11.8	11.1	5.7	3.2	6.3	2.1	2.0	1.5
21												
22 IAF		199.6	196.0	196.9	215.4	236.3	249.4	257.7	273.3	279.6	285.8	290.8
23 IAF		6.5	-1.8	0.4	9.4	9.7	5.5	3.3	6.0	2.3	2.3	1.7
24												
25 IAFN		140.1	144.5	147.9	161.7	176.1	186.6	193.7	202.5	206.4	213.4	221.1
26 IAFN		7.9	3.2	2.4	9.3	8.9	6.0	3.8	4.5	2.0	3.4	3.6
27												
28 IAFR		59.5	51.5	49.0	53.7	60.2	62.8	64.0	70.8	73.1	72.4	69.7
29 IAFR		3.2	-13.5	-4.9	9.6	12.2	4.3	1.9	10.6	3.3	-1.0	-3.8
30												
31 IAIT		11.2	6.7	6.2	11.6	16.0	17.2	17.4	19.1	18.9	18.6	18.4
32												
33 IAR		9.7	21.1	26.3	24.3	22.4	21.7	20.3	20.9	24.5	26.6	29.6
34												
35 IER		108.3	125.3	133.5	140.1	146.3	152.9	158.6	168.1	179.1	190.0	200.4
36 IER		10.2	15.8	6.5	5.0	4.4	4.5	3.7	6.0	6.6	6.1	5.5
37												
38 IMA		98.6	104.3	107.2	115.8	124.0	131.2	138.2	147.1	154.7	161.4	170.8
39 IMA		11.1	5.8	2.8	8.0	7.1	5.9	5.4	6.4	5.1	5.6	4.6
40												
41 GVP		274.9	282.1	286.3	293.3	301.2	309.3	317.5	325.7	334.4	343.0	351.9
42 GVP		2.1	2.6	1.5	2.4	2.7	2.7	2.6	2.6	2.7	2.6	2.6
43												
44 GVPF		100.1	102.9	104.7	107.0	109.4	111.8	114.3	116.8	119.4	122.1	124.8
45 GVPF		-1.5	2.9	1.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
46												
47 GVP9		174.8	179.1	181.6	186.3	191.8	197.5	203.2	208.9	214.9	220.9	227.2
48 GVP9		9.3	2.5	1.4	2.6	3.0	3.0	2.9	2.8	2.9	2.8	2.8

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CHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 3.10 PERSONAL CONSUMPTION EXPENDITURES

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	-----CURRENT DOLLARS-----										
2	-----										
3 CEN	I PERSONAL CONSUMPTION EXPENDITURES 1336.511465.4 1599.3 1774.7 1962.2 2161.2 2364.4 2585.8 2800.2 3016.4 3229.6										
4	-----										
5 CEDS	I DURABLE GOODS----- 195.81 209.7 228.3 256.3 284.9 313.2 340.7 375.1 404.4 433.8 460.1										
6 CEDAS	I AUTOS AND PARTS----- 89.11 92.0 101.2 116.9 131.2 143.4 153.1 167.8 179.0 191.0 201.3										
7 CEDFS	I FURNITURE AND HOUSEHOLD EQUIP. 77.11 84.3 90.4 98.8 108.8 120.6 134.2 149.0 162.7 175.6 187.1										
8 CEDDS	I OTHER DURABLE GOODS----- 29.61 33.4 36.7 40.7 44.6 49.2 53.4 58.2 62.7 67.3 71.7										
9	-----										
10 CENS	I NONDURABLE GOODS----- 521.91 572.1 618.4 677.9 740.4 806.5 873.2 944.4 1013.9 1082.4 1149.2										
11 CENSF	I FOOD AND BEVERAGES----- 268.91 290.0 309.7 337.7 368.0 400.2 433.3 468.1 501.7 536.6 567.0										
12 CENC	I CLOTHING AND SHOES----- 88.11 96.6 104.9 115.3 126.2 137.7 149.2 161.3 172.6 184.1 195.1										
13 CENG	I GASOLINE AND OIL----- 50.31 56.6 62.7 69.2 74.8 80.1 84.7 89.1 93.6 98.0 102.0										
14 CENHHS	I OTHER NONDURABLE GOODS----- 116.61 128.9 141.1 155.8 171.3 188.5 206.0 225.9 245.7 265.7 285.2										
15	-----										
16 CES	I SERVICES----- 616.81 683.6 752.6 840.5 936.9 1041.5 1150.5 1266.3 1381.9 1500.2 1620.4										
17 CESHS	I HOUSING----- 207.01 230.7 252.8 278.7 309.6 343.2 377.9 413.4 448.6 483.8 519.1										
18 CESFS	I HOUSEHOLD OPERATION SERVICES----- 91.91 101.1 110.4 122.0 134.1 147.2 161.0 175.7 189.9 204.2 218.5										
19 CESFS	I TRANSPORTATION SERVICES----- 52.71 59.3 65.1 72.9 81.4 90.6 100.1 110.0 120.2 130.8 141.1										
20 CESOS	I OTHER SERVICES----- 265.11 292.5 324.3 366.9 411.9 460.4 511.4 567.2 623.2 681.4 741.7										
21	-----										
22	-----CONSTANT 72 DOLLARS-----										
23	-----										
24 CE	I PERSONAL CONSUMPTION EXPENDITURES 888.91 910.9 933.5 969.5 1005.1 1040.0 1072.9 1111.6 1146.3 1181.3 1214.6										
25	-----										
26 CED	I DURABLE GOODS----- 143.31 144.7 149.6 158.7 167.9 175.9 182.9 193.1 200.5 207.6 213.2										
27 CEDA	I AUTOS AND PARTS----- 61.11 58.1 59.7 65.3 70.1 72.9 73.9 77.3 78.7 80.3 81.1										
28 CEDF	I FURNITURE AND HOUSEHOLD EQUIP. 60.01 62.6 64.6 66.8 70.0 74.1 79.0 84.5 89.2 93.5 97.1										
29 CEDD	I OTHER DURABLE GOODS----- 22.31 24.0 25.3 26.5 27.7 28.9 30.0 31.3 32.6 33.8 35.1										
30	-----										
31 CEN	I NONDURABLE GOODS----- 337.91 346.7 354.3 366.2 376.9 387.2 396.7 407.5 417.8 428.3 438.5										
32 CENF	I FOOD AND BEVERAGES----- 165.01 164.9 164.4 169.6 174.1 178.3 182.1 186.0 189.7 193.5 197.4										
33 CENC	I CLOTHING AND SHOES----- 70.01 74.1 77.9 81.2 84.4 87.6 90.6 94.1 97.4 100.7 104.1										
34 CENG	I GASOLINE AND OIL----- 27.01 29.4 30.6 31.3 31.5 31.5 31.3 31.0 30.8 30.7 30.4										
35 CENHHS	I OTHER NONDURABLE GOODS----- 75.11 78.4 81.3 84.1 86.8 89.8 92.7 96.4 99.9 103.4 106.6										
36	-----										
37 CFS	I SERVICES----- 407.61 419.4 429.6 444.6 460.4 476.9 493.4 511.0 528.0 545.3 562.8										
38 CFSH	I HOUSING----- 146.51 150.7 152.7 156.3 161.4 167.0 172.7 178.5 184.3 190.1 196.1										
39 CFSF	I HOUSEHOLD OPERATION SERVICES----- 58.41 60.1 61.6 63.9 66.6 69.5 72.4 75.6 78.5 81.4 84.3										
40 CFSF	I TRANSPORTATION SERVICES----- 34.21 35.8 36.8 38.2 39.6 41.1 42.3 43.7 45.0 46.3 47.5										
41 CFSO	I OTHER SERVICES----- 168.61 172.0 178.6 186.2 192.8 199.4 205.9 213.3 220.3 227.5 234.9										

A PRODUCT OF CHARTON CFA, INC., 3628 MARKET ST, PHILA, PA 19104 \*FITTED PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 3.20 PERSONAL CONSUMPTION EXPENDITURES, GROWTH RATES

LINE VAP LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
-----CURRENT DOLLARS-----											
1 PERSONAL CONSUMPTION EXPENDITURES	10.8	9.6	9.1	11.0	10.6	10.1	9.4	9.4	8.3	7.7	7.1
2 DURABLE GOODS	9.8	7.1	8.8	12.3	11.2	9.9	8.8	10.1	7.8	7.3	6.0
3 CEDS	9.4	3.2	10.0	15.5	12.3	9.3	6.7	9.6	6.7	6.7	5.3
4 CEDAS	8.1	9.4	7.2	9.3	10.2	10.8	11.2	11.1	9.1	7.9	6.6
5 CEDFS	15.5	12.9	10.0	10.8	10.2	9.6	8.7	8.9	7.8	7.2	6.6
6 CEDNS	9.4	9.2	8.1	9.6	9.2	8.9	8.3	8.2	7.4	6.8	6.2
7 CEDNS	9.4	7.8	6.8	9.1	9.0	8.8	8.3	8.0	7.2	6.6	6.0
8 CEDNS	8.1	9.6	8.6	9.9	9.5	9.1	8.4	8.1	7.1	6.5	6.0
9 CEDNS	8.4	12.4	10.9	10.2	8.2	7.1	5.8	5.2	5.0	4.7	4.1
10 CEDNS	10.1	10.6	9.4	10.4	10.0	10.0	9.3	9.7	8.8	8.1	7.3
11 SERVICES	12.3	10.8	10.1	11.7	11.5	11.2	10.5	10.1	9.1	8.6	8.0
12 CEHS	12.2	11.4	9.6	10.6	10.2	10.1	10.1	9.4	8.5	7.8	7.3
13 CEHS	12.6	10.1	9.1	10.6	9.9	9.8	9.4	9.1	8.1	7.5	7.0
14 CEHS	19.3	12.4	9.9	11.9	11.7	11.4	10.5	9.9	9.1	8.8	7.9
15 CEHS	11.0	10.3	10.9	13.1	12.3	11.8	11.1	10.9	9.9	9.3	8.9
-----CONSTANT 72 DOLLARS-----											
1 PERSONAL CONSUMPTION EXPENDITURES	3.6	2.5	2.5	3.9	3.7	3.5	3.2	3.6	3.1	3.1	2.8
2 DURABLE GOODS	4.0	1.0	3.4	6.1	5.8	4.8	4.0	5.6	3.8	3.6	2.7
3 CEDS	1.8	-4.8	2.7	9.4	7.3	4.0	1.4	4.6	1.8	2.1	1.0
4 CEDAS	4.1	4.4	3.1	3.5	4.8	5.8	6.6	7.0	5.6	4.8	3.8
5 CEDFS	10.3	7.8	5.5	4.8	4.5	4.3	3.7	4.5	4.0	3.8	3.7
6 CEDNS	2.3	2.6	2.2	3.4	2.9	2.8	2.4	2.7	2.5	2.5	2.4
7 CEDNS	-0.0	-0.1	-0.1	3.1	2.7	2.4	2.2	2.1	2.0	2.0	2.0
8 CEDNS	5.1	5.9	5.1	4.3	3.9	3.7	3.5	3.8	3.5	3.4	3.4
9 CEDNS	4.8	5.3	4.3	2.3	0.7	-0.0	-0.8	-0.9	-0.6	-0.6	-0.9
10 CEDNS	4.3	4.4	3.8	3.4	3.2	3.5	3.1	4.0	3.7	3.5	3.1
11 SERVICES	4.7	2.9	2.4	3.5	3.6	3.6	3.4	3.6	3.3	3.3	3.2
12 CEHS	4.4	2.9	1.3	2.4	3.3	3.5	3.4	3.3	3.2	3.2	3.1
13 CEHS	5.4	3.0	2.5	3.7	4.2	4.4	4.2	4.3	3.9	3.7	3.6
14 CEHS	10.9	4.8	2.7	3.9	3.8	3.6	3.1	3.1	3.0	2.9	2.6
15 CEHS	3.5	2.5	3.3	4.3	3.5	3.4	3.3	3.6	3.3	3.3	3.3

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TABLE 3.30 AUTOMOBILE CONSUMPTION

LINE	VAR LABEL	I	T	F	A	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
AUTOMOBILES (MILLION VEHICLES)																
1																
2																
3	SALESDAV					11.32	13.79	10.91	12.31	13.04	13.29	13.27	13.66	13.56	13.53	13.32
4	STOCK IN USE (END OF YEAR)					103.10	105.00	106.87	110.01	112.79	115.42	117.86	120.29	122.52	124.73	126.65
5	NEW REGISTRATIONS					11.02	10.51	10.62	11.96	12.66	12.89	12.88	13.25	13.15	13.12	12.92
6	DISAV					8.90	8.60	8.74	8.82	9.47	10.26	10.44	10.82	10.92	10.91	11.00
7	DISAVEXP					8.99	9.19	9.37	9.54	9.74	9.89	9.94	10.04	10.23	10.52	10.81
8	NAVRAGE					5.44	5.47	5.48	5.43	5.37	5.31	5.29	5.27	5.28	5.31	5.16
9																
PERSONAL CONSUMPTION EXPENDITURES (MILLION 1972 \$)																
10																
11																
12						61.11	58.11	59.77	65.33	70.11	72.99	73.99	77.33	78.77	80.33	81.11
13	CEDA					30.11	32.88	33.00	37.00	40.11	41.77	42.00	44.11	44.66	45.22	45.22
14	CEDAVN					8.41	8.7	8.7	8.6	8.8	9.1	9.3	9.6	9.9	10.3	10.6
15	CEDAVN+T					7.81	8.1	8.4	9.1	9.6	9.9	10.2	10.6	11.0	11.5	11.9
16	CEDAVU															
17	CEDAP															
18																
PERSONAL CONSUMPTION EXPENDITURES (MILLION CURRENT \$)																
19																
20																
21						89.11	92.00	101.22	116.99	131.22	143.44	153.11	167.88	179.00	191.00	201.33
22	CEDAS					50.11	48.88	51.99	61.66	69.55	75.55	79.55	86.99	91.33	96.22	99.66
23	CEDAVN3					11.61	12.77	15.22	18.22	21.11	23.55	25.33	28.33	30.33	32.44	34.11
24	CEDAVN+T3					17.00	18.99	21.22	22.22	23.99	26.00	28.11	30.88	33.66	36.55	39.55
25	CEDAVU3					10.41	11.66	13.00	14.99	16.77	18.33	20.11	21.44	23.99	25.99	28.00
26	CEDAP3															
27																
NEW CAR OPERATING COSTS (DOLLARS PER MILE)																
28																
29																
30																
31	UCCEADNCS					0.2181	0.232	0.245	0.260	0.275	0.290	0.307	0.326	0.344	0.363	0.381
32	UCCEADNCS3					0.0851	0.093	0.100	0.107	0.115	0.122	0.129	0.137	0.145	0.153	0.161
33	UCCEADNCSG					0.0461	0.046	0.046	0.045	0.044	0.044	0.045	0.047	0.049	0.051	0.053
34	UCCEADNCSG					0.0871	0.094	0.100	0.108	0.116	0.124	0.133	0.142	0.150	0.159	0.167
35																
36																
37	NPTLD					141.21	144.33	147.22	149.99	152.55	154.99	157.22	159.44	161.88	164.11	166.22
38	NPTMIA					14.41	14.33	14.22	14.11	14.00	13.99	13.88	13.77	13.66	13.55	13.44
39																
40																
FUEL CONSUMPTION																
41	CEMG					27.91	29.44	30.66	31.33	31.55	31.55	31.33	31.00	30.88	30.77	30.44
42	MPV					10.55	10.73	10.92	11.05	11.29	11.56	11.79	12.02	12.25	12.46	12.58
43	MPG					14.25	15.14	16.24	17.79	19.34	20.88	21.64	22.04	22.24	22.44	22.65
44	MPG					11.29	12.01	12.90	14.16	15.42	16.68	17.32	17.68	17.86	18.04	18.22
45	MPG					20.65	22.22	23.78	25.92	28.05	30.15	31.11	31.52	31.75	31.99	32.23
46	MPGAVG					12.81	13.05	13.39	13.67	14.52	15.32	16.20	17.11	18.00	18.85	19.64
47																
48	PUCFADAV					4.681	4.703	4.781	4.839	4.966	5.091	5.152	5.270	5.383	5.494	5.592
49	CEDAVN+T/V					23.161	23.85	24.86	26.06	27.16	28.16	29.26	29.36	29.46	29.56	29.66
50	RACFADAV					0.6830	0.6870	0.6332	0.6204	0.6184	0.6164	0.6104	0.6124	0.6104	0.6084	0.6064
51	RACFADAV					0.3245	0.3361	0.3462	0.3462	0.3482	0.3502	0.3522	0.3522	0.3562	0.3582	0.3602

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TABLE V.40 AUTOMOBILE CONSUMPTION, GROWTH RATES

LINE	VAR LABEL	1970	1971	1972	1973	1974	1975	1976	1977	1978
1	AUTOMOBILES (MILLION VEHICLES)									
2	R RETAIL SALES	1.41	1.1	1.2	1.9	2.9	2.9	2.9	2.9	2.9
3	R STOCK IN USE (END OF YEAR)	2.11	1.8	2.5	2.3	2.1	2.1	2.1	2.1	2.1
4	R NEW REGISTRATIONS	1.41	1.0	1.0	1.8	2.9	2.9	2.9	2.9	2.9
5	I ACTUAL SCRAPAGE	1.71	1.6	0.9	3.9	3.6	3.6	3.6	3.6	3.6
6	I EXPECTED SCRAPAGE	2.71	2.3	1.9	1.5	0.9	0.9	0.9	0.9	0.9
7	I AVERAGE AGE OF THE STOCK (YEARS)	-0.21	0.4	0.3	-1.0	-0.5	-0.5	-0.5	-0.5	-0.5
8	PERSONAL CONSUMPTION EXPENDITURES (BILLION 1972 \$)									
9	I AUTOS AND PARTS	1.81	2.7	7.3	4.0	4.6	4.6	4.6	4.6	4.6
10	R NEW CARS	0.31	0.6	8.4	4.1	5.0	5.0	5.0	5.0	5.0
11	R RECREATIONAL VEH & TRUCKS	4.61	12.3	8.8	4.5	5.3	5.3	5.3	5.3	5.3
12	R NEW USED CARS	3.01	0.2	3.0	3.2	3.3	3.3	3.3	3.3	3.3
13	R TIRES, TUBES & PARTS	2.91	4.3	5.2	3.5	3.6	3.6	3.6	3.6	3.6
14	PERSONAL CONSUMPTION EXPENDITURES (BILLION CURRENT \$)									
15	I AUTOS AND PARTS	9.41	10.0	12.3	9.3	9.6	9.6	9.6	9.6	9.6
16	R NEW CARS	2.7	6.3	12.9	8.6	9.2	9.2	9.2	9.2	9.2
17	R RECREATIONAL VEH & TRUCKS	13.61	19.6	16.1	11.4	11.5	11.5	11.5	11.5	11.5
18	R NEW USED CARS	9.41	11.8	7.9	8.9	9.4	9.4	9.4	9.4	9.4
19	R TIRES, TUBES & PARTS	9.51	11.9	11.7	9.8	9.2	9.2	9.2	9.2	9.2
20	NEW CAR OPERATING COSTS (DOLLARS PER MILE)									
21	I TOTAL	6.81	5.6	5.9	5.7	6.0	6.0	6.0	6.0	6.0
22	I CAPITALIZED PURCHASE COST	11.71	7.3	7.5	6.4	6.1	6.1	6.1	6.1	6.1
23	I GASOLINE	-2.41	0.4	-1.6	-0.9	4.1	4.1	4.1	4.1	4.1
24	I OTHER	7.61	7.3	7.6	7.4	6.5	6.5	6.5	6.5	6.5
25	NUMBER OF PERSONS (MILLIONS)									
26	R LICENSED DRIVERS	2.41	2.0	1.9	1.6	1.5	1.5	1.5	1.5	1.5
27	E DOMESTIC COMPUTERS	-0.71	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
28	FUEL CONSUMPTION									
29	R CONSUMPTION, GASOLINE AND OIL	4.81	4.3	2.3	-0.0	-0.8	-0.8	-0.8	-0.8	-0.8
30	R MILES PER GALLON OF CAR	1.91	1.7	1.3	2.4	2.0	2.0	2.0	2.0	2.0
31	R MILES PER GALLON OF TRUCK	6.21	7.3	9.5	8.7	3.6	3.6	3.6	3.6	3.6
32	R CITY DRIVING	6.21	7.4	9.8	8.9	3.8	3.8	3.8	3.8	3.8
33	R HIGHWAY DRIVING	6.01	7.0	9.0	7.5	3.2	3.2	3.2	3.2	3.2
34	I AVERAGE, ALL CARS	1.21	2.6	3.6	5.5	5.8	5.8	5.8	5.8	5.8
35	I UNIT PRICE, '74 CARS (1972 \$)	2.71	1.7	1.2	2.5	2.3	2.3	2.3	2.3	2.3

A PROGRESS IN QUANTUM ELECTRODYNAMICS, PART II, BY JULIAN SCHWINGER, PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

QUANTON ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 4.10 FIXED INVESTMENT (CURRENT \$)

LINE	VAR LABEL	I T F II	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IFIX	I FIXED INVESTMENT	328,743,350.73	378,032,446.40	527.24	596.72	659.22	745.61	809.20	872.18	931.41		
2	IRFIX	I NONRESIDENTIAL INVESTMENT	222,391,247.44	269,773,317.31	370.65	420.49	466.36	518.36	560.05	611.28	666.84		
3	IARFIX	I NONRESIDENTIAL INVEST EXCL IHA	166,181,866.82	210,202,240.09	292.57	334.17	372.66	414.20	450.04	492.72	539.15		
4	IARFIX	I FARM	13,911	15,95	16.59	20.77	25.79	31.18	36.37	40.20	43.49	46.94	50.63
5	IARFIX	I MINING	4,771	5.49	6.44	8.00	9.77	11.17	12.15	13.45	14.91	17.23	19.61
6	IARFIX	I TOTAL MANUFACTURING	67,461	76.37	85.57	100.48	117.33	132.59	146.24	161.76	175.16	190.52	206.41
7	IARFIX	I DURABLE GOODS	31,441	36.73	41.89	49.54	57.60	64.16	69.91	77.51	84.22	91.19	97.97
8	IARFIX	I LUMBER	1,411	1.62	1.75	2.09	2.54	3.03	3.40	3.83	4.23	4.68	5.21
9	IARFIX	I FURNITURE	0.291	0.32	0.36	0.44	0.50	0.54	0.60	0.67	0.71	0.78	0.85
10	IARFIX	I STONE, CLAY AND GLASS	2,231	2.45	2.86	3.32	4.26	4.98	5.38	5.73	6.05	6.57	7.27
11	IARFIX	I PRIMARY METALS	6,411	7.53	8.65	10.33	11.74	13.02	14.16	15.65	16.85	17.77	18.56
12	IARFIX	I FABRICATED METAL PRODUCTS	2,561	2.90	3.15	3.75	4.29	4.63	5.11	5.76	6.11	6.46	6.97
13	IARFIX	I NONELECTRICAL MACHINERY	6,671	7.85	8.90	10.42	12.25	13.84	15.18	16.92	18.45	20.15	21.86
14	IARFIX	I ELECTRICAL MACHINERY	3,531	4.27	4.80	5.86	6.97	7.84	8.55	9.33	10.15	11.17	12.23
15	IARFIX	I MOTOR VEHICLES	4,691	5.66	6.70	7.72	8.40	8.48	8.95	10.30	11.52	12.42	12.80
16	IARFIX	I NONAUTO TRANSPORT + UTD + MISC	2,321	2.65	2.99	3.58	4.24	4.83	5.32	5.89	6.39	7.06	7.78
17	IARFIX	I INSTRUMENTS	1,531	1.48	1.71	2.02	2.41	2.76	3.05	3.43	3.78	4.13	4.45
18	IARFIX	I NONDURABLE GOODS	36,021	39.64	43.68	50.94	59.73	68.03	75.32	84.24	90.93	99.33	108.44
19	IARFIX	I FOOD AND BEVERAGES	4,731	5.11	5.68	6.54	7.11	7.66	8.47	9.69	10.87	12.24	13.90
20	IARFIX	I TOBACCO	0,261	0.29	0.31	0.35	0.40	0.45	0.51	0.56	0.63	0.69	0.76
21	IARFIX	I TEXTILES	1,021	1.12	1.28	1.55	1.88	2.17	2.38	2.62	2.80	2.98	3.14
22	IARFIX	I APPAREL	0,401	0.43	0.50	0.59	0.70	0.80	0.90	1.03	1.13	1.25	1.38
23	IARFIX	I PAPER	3,871	4.66	5.28	6.10	7.22	8.39	9.44	10.42	11.51	12.73	14.03
24	IARFIX	I PRINTING AND PUBLISHING	1,111	1.19	1.36	1.57	1.82	2.08	2.34	2.65	2.93	3.26	3.63
25	IARFIX	I CHEMICALS	7,471	8.32	9.54	11.41	13.46	15.84	18.10	20.08	21.80	24.40	26.80
26	IARFIX	I PETROLEUM	15,331	16.46	17.38	20.01	23.58	26.93	29.59	31.98	33.44	35.33	37.78
27	IARFIX	I RUBBER	1,651	1.87	2.13	2.53	3.27	3.78	4.22	4.80	5.40	6.00	6.55
28	IARFIX	I LEATHER	0,171	0.19	0.22	0.27	0.30	0.34	0.37	0.40	0.43	0.45	0.47
29	IARFIX	I TRANSPORTATION	8,321	8.67	9.33	10.94	12.06	13.04	14.35	16.12	17.45	20.20	22.85
30	IARFIX	I UTILITIES	28,941	32.62	37.28	43.29	50.19	57.21	63.78	70.99	76.95	84.14	92.62
31	IARFIX	I COMMUNICATIONS	17,741	20.18	23.89	28.79	34.05	39.25	43.87	48.65	52.85	58.23	64.42
32	IARFIX	I COMMERCIAL AND OTHER	81,251	88.16	90.87	105.04	121.46	136.05	149.61	167.19	178.85	194.03	210.30
33	IARFIX	I COMMERCIAL	25,041	27.54	31.29	36.82	43.38	49.73	55.91	63.03	68.83	75.47	82.61
34	IARFIX	I CONCEPTUAL OFF, DEA VS DIA	56,211	60.62	59.57	68.22	78.07	86.32	93.71	104.16	110.01	118.56	127.68
35	IARFIX	I RESIDENTIAL STRUCTURES	106,351	103.29	108.32	120.09	156.59	176.23	192.86	227.26	249.15	260.90	264.57
36	IARFIX	I NONRESIDENTIAL STRUCTURES	103,141	90.72	104.33	124.68	151.73	170.89	187.01	220.88	242.22	253.39	256.45
37	IARFIX	I FARM RESIDENTIAL STRUCTURES	1,071	1.78	1.96	2.08	2.19	2.31	2.42	2.54	2.65	2.77	2.89
38	IARFIX	I RESIDENTIAL INAPPROPRIATE	1,701	1.79	2.02	2.34	2.67	3.04	3.43	3.84	4.28	4.74	5.23

A PRODUCT OF QUANTON INC., P.O. BOX 3628, GAITHERSBURG, MD 20878. ALL FIGURES MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

QUARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 4.20 FIXED INVESTMENT, GROWTH RATES

LINE	VAN LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IRFS	16.51	6.7	7.8	18.1	18.1	13.2	10.5	13.1	8.5	7.8	6.8
2												
3	IRFNS	16.81	11.3	9.0	17.6	16.8	13.4	10.9	11.1	8.0	9.1	9.1
4												
5	IATAGS	11.91	12.4	12.5	18.5	17.5	14.2	11.5	11.1	8.7	9.5	9.4
6												
7	IAGS	9.71	14.7	2.8	26.7	24.1	20.9	16.6	10.5	8.2	7.9	7.9
8	IAMG	6.01	15.1	17.3	24.3	22.2	14.3	8.7	10.7	10.9	15.5	13.8
9	IAMS	12.11	13.2	12.0	17.4	16.8	13.0	10.3	10.6	8.3	8.8	8.3
10												
11	IAMEDS	13.21	16.8	14.0	18.3	16.3	11.4	9.0	10.9	8.7	8.3	7.4
12												
13	IAMED203	13.61	15.0	8.3	19.0	21.8	18.9	12.5	12.5	9.9	11.3	11.2
14	IAMED253	11.01	10.7	12.6	23.0	12.0	8.6	11.7	11.1	6.3	9.4	8.9
15	IAMED323	11.91	10.0	16.7	16.2	28.1	16.8	8.1	6.5	5.6	8.7	10.6
16	IAMED333	12.81	17.6	14.9	19.3	13.7	11.0	8.7	10.6	7.7	5.5	4.4
17	IAMED303	12.01	13.2	8.7	18.9	14.3	12.7	10.0	8.5	5.9	5.8	7.9
18	IAMED353	15.81	17.1	13.3	17.1	17.6	13.0	9.7	11.5	9.1	9.2	8.5
19	IAMED363	7.71	20.6	12.6	22.0	18.8	12.5	9.1	9.1	8.8	10.0	9.5
20	IAMED3713	15.51	20.8	18.4	15.2	8.8	0.9	5.5	15.1	11.9	7.7	3.1
21	IAMED37SP23	14.71	14.3	12.8	20.1	18.2	13.9	10.2	10.6	8.5	10.4	10.2
22	IAMED313	12.21	10.5	16.0	17.9	19.6	14.6	10.4	12.3	10.3	9.3	7.7
23												
24	IAMFN3	11.21	10.0	10.2	16.6	17.3	14.6	11.5	10.4	7.9	9.2	9.2
25												
26	IAMFN203	13.21	7.9	11.3	15.1	8.7	7.7	10.6	14.4	12.1	12.7	13.5
27	IAMFN213	9.71	8.7	8.6	13.9	13.2	12.7	12.2	11.4	10.8	10.2	10.4
28	IAMFN223	11.11	9.9	13.8	21.1	21.4	15.2	9.8	10.3	6.7	6.3	5.4
29	IAMFN233	8.11	7.9	15.2	19.3	17.2	15.0	13.1	13.8	10.0	10.5	10.1
30	IAMFN263	15.21	20.4	13.2	15.6	19.3	16.3	12.5	10.5	10.4	10.6	10.2
31	IAMFN273	9.61	7.8	14.2	15.8	15.7	14.3	12.5	13.3	10.7	11.2	11.3
32	IAMFN283	9.41	11.4	14.6	19.6	17.9	17.7	14.3	11.0	8.5	11.9	9.8
33	IAMFN293	10.61	7.3	5.6	15.2	17.8	14.2	9.9	8.1	4.6	5.6	6.9
34	IAMFN303	13.71	13.3	13.9	18.8	29.4	15.4	11.8	13.7	12.6	11.0	9.2
35	IAMFN313	7.81	11.1	16.9	20.3	9.6	14.1	10.4	8.6	5.4	5.8	5.5
36												
37	IARGIS	20.01	4.2	7.6	17.2	10.3	8.1	10.1	12.4	10.7	13.2	13.1
38												
39	IARGI493	12.21	12.7	14.3	16.1	15.9	14.0	11.5	11.3	8.4	9.3	10.1
40												
41	IARGI493	10.81	13.8	16.4	20.5	18.3	15.3	11.8	10.9	8.6	10.2	10.6
42												
43	IACI3	25.31	8.5	5.1	15.6	15.6	12.0	10.0	11.7	7.0	8.5	8.4
44	IACI3	9.01	10.0	13.6	17.7	17.8	14.6	12.4	12.7	9.2	9.6	9.5
45	IACI3	30.21	7.9	-1.7	14.5	14.4	10.6	8.6	11.2	5.6	7.8	7.7
46												
47	IADFX	15.81	-2.0	4.9	19.2	21.3	12.5	9.4	17.8	9.6	4.7	1.4
48												
49	IADFX	16.01	-3.3	4.6	19.5	21.7	12.6	9.4	18.1	9.7	4.6	1.2
50	IADFX	-1.41	21.1	10.4	5.8	5.6	5.2	5.0	4.8	4.6	4.4	4.5
51	IADFX	18.41	2.7	13.1	15.8	14.1	13.7	12.8	12.1	11.4	10.8	10.2

A PRODUCT OF QUARTON, INC., 3620 ROCKEFELLER ST., PHILA. 19104. WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



CHARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
 HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 5.10 FIXED INVESTMENT (1972 \$)

LINE	VAP LABEL	I	J	F	I	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	INF	I	FIXED INVESTMENT			199.62	196.02	196.89	215.39	236.31	249.39	257.67	273.25	279.55	285.85	290.77
2	INFH	I	NONRESIDENTIAL INVESTMENT			140.00	144.52	147.92	161.70	176.09	186.57	193.67	202.46	206.41	213.40	221.06
3	INFH	I	NONRESIDENTIAL INVEST EXCL TRA			104.68	109.11	115.25	126.93	139.00	148.28	154.75	161.78	165.87	172.01	178.73
4	IAAG	H	FARM			8.76	9.12	8.99	10.59	12.25	13.84	15.10	15.70	16.03	16.39	16.78
5	IAAG	H	MINING			3.00	3.21	3.53	4.08	4.84	4.96	5.05	5.25	5.50	6.02	6.50
6	IAAG	H	TOTAL MANUFACTURING			42.49	44.60	46.92	51.20	55.74	58.83	60.73	63.18	64.56	66.51	68.43
7	IAAG	H	DURABLE GOODS			19.80	21.45	22.97	25.25	27.36	28.47	29.03	30.27	31.04	31.84	32.48
8	IAAGD24	H	LUMBER			0.89	0.95	0.96	1.06	1.21	1.34	1.41	1.50	1.55	1.63	1.73
9	IAAGD25	H	FURNITURE			0.18	0.19	0.20	0.23	0.24	0.24	0.25	0.26	0.26	0.27	0.28
10	IAAGD32	H	STONE, CLAY AND GLASS			1.40	1.43	1.57	1.69	2.02	2.21	2.23	2.24	2.23	2.30	2.41
11	IAAGD33	H	PRIMARY METALS			4.03	4.40	4.74	5.26	5.58	5.78	5.88	6.11	6.21	6.26	6.15
12	IAAGD34	H	FABRICATED METAL PRODUCTS			1.62	1.70	1.73	1.91	2.04	2.14	2.21	2.25	2.25	2.26	2.31
13	IAAGD35	H	NONMETAL MACHINERY			4.20	4.59	4.88	5.31	5.82	6.14	6.30	6.61	6.80	7.03	7.25
14	IAAGD36	H	ELECTRICAL MACHINERY			2.23	2.49	2.63	2.99	3.31	3.48	3.55	3.65	3.74	3.90	4.06
15	IAAGD37	H	MOTOR VEHICLES			2.95	3.31	3.68	3.94	3.99	3.76	3.72	4.02	4.25	4.33	4.24
16	IAAGD38	H	NONAUTOTRANS EX + MISC			1.46	1.55	1.64	1.83	2.01	2.14	2.21	2.30	2.36	2.46	2.58
17	IAAGD39	H	INSTRUMENTS			0.84	0.86	0.94	1.03	1.15	1.23	1.27	1.34	1.39	1.44	1.47
18	IAAGD40	H	NONDURABLE GOODS			22.69	23.15	23.95	25.96	28.38	30.36	31.69	32.90	33.51	34.68	35.95
19	IAAGD41	H	FOOD AND BEVERAGES			2.98	2.98	3.12	3.33	3.38	3.40	3.52	3.79	4.00	4.27	4.61
20	IAAGD42	H	TOBACCO			0.17	0.17	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25
21	IAAGD43	H	TEXTILES			0.60	0.66	0.70	0.79	0.89	0.96	0.99	1.02	1.03	1.04	1.04
22	IAAGD44	H	APPAREL			0.25	0.25	0.27	0.30	0.33	0.35	0.38	0.40	0.42	0.44	0.46
23	IAAGD45	H	PAPER			2.00	2.72	2.89	3.11	3.43	3.72	3.92	4.07	4.24	4.44	4.65
24	IAAGD46	H	PRINTING AND PUBLISHING			0.70	0.70	0.75	0.80	0.86	0.92	0.97	1.03	1.08	1.14	1.20
25	IAAGD47	H	CHEMICALS			4.71	4.86	5.23	5.82	6.39	7.03	7.52	7.84	8.03	8.52	8.89
26	IAAGD48	H	PETROLEUM			9.66	9.61	9.53	10.20	11.20	11.95	12.29	12.49	12.32	12.33	12.52
27	IAAGD49	H	RUBBER			1.04	1.09	1.17	1.29	1.56	1.68	1.75	1.87	1.99	2.09	2.17
28	IAAGD50	H	LEATHER			0.11	0.11	0.12	0.14	0.14	0.15	0.15	0.16	0.16	0.16	0.16
29	IAAGD51	H	TRANSPORTATION			5.20	5.06	5.12	5.57	5.73	5.78	5.96	6.30	6.58	7.05	7.58
30	IAAGD52	H	UTILITIES			18.23	19.05	20.44	22.06	23.84	25.38	26.49	27.73	28.36	29.37	30.71
31	IAAGD53	H	COMMUNICATIONS			11.17	11.78	13.10	14.67	16.17	17.41	18.22	19.00	19.48	20.33	21.35
32	IAAGD54	H	COMMERCIAL AND OTHER			51.18	51.49	49.82	53.53	57.70	60.37	62.13	65.30	65.92	67.74	69.72
33	IAAGD55	H	COMMERCIAL			15.77	16.08	17.16	18.76	20.61	22.07	23.22	24.62	25.37	26.35	27.39
34	IAAGD56	H	CONCEPTUAL DIFF. TRA VS TRA			35.40	35.40	32.67	34.77	37.09	38.30	38.91	40.68	40.55	41.59	42.33

A PRODUCT OF CHARTER FEA, INC., 3620 MARKET ST., PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

QUANTON APRIAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 5.10 FIXED INVESTMENT (1972 \$)

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IRFR	RESIDENTIAL STRUCTURES	59.51	51.5	49.0	51.7	60.2	62.8	64.0	70.8	73.1	72.4	69.7
2	IRFR1	INDUSTRY	57.41	49.3	46.7	51.3	57.8	60.3	61.3	68.0	70.3	69.5	66.6
3	IRFR2	FARM	0.81	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
4	IRFR3	RESIDENTIAL DURABLE EQUIP.	1.31	1.3	1.4	1.5	1.6	1.7	1.6	1.9	2.0	2.1	2.2
5	IRFR4	ADDITIONS AND ALTERATIONS	12.91	13.3	14.1	14.4	14.7	14.3	14.2	14.7	14.4	14.1	13.8
6	HSR	PRIVATE HOUSING STARTS (THOU)	1982.1	1655.	1521.	1700.	1979.	2049.	2115.	2294.	2433.	2395.	2260.
7	HSR1	SINGLE UNITS	1390.1	1171.	1149.	1245.	1449.	1462.	1496.	1650.	1697.	1654.	1573.
8	HSR2	MULTIPLE UNITS	592.1	484.	372.	455.	531.	587.	619.	644.	736.	741.	686.
9	HSR3	MORILE HOMES	265.1	250.	239.	324.	312.	463.	390.	469.	406.	385.	362.
10	HSR4	PUBLIC HOUSING STARTS (THOU)	1.1	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
11	HSR5	SINGLE UNITS	0.1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12	HSR6	MULTIPLE UNITS	0.1	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
13	HSR7	TOTAL STOCK OF RES UNITS (MILL)	81.631	82.76	83.71	84.90	86.32	87.93	89.50	91.10	93.15	94.92	96.52
14	HSR8	SINGLE UNITS	54.341	55.19	56.01	56.93	58.04	59.15	60.30	61.59	62.92	64.20	65.39
15	HSR9	MULTIPLE UNITS	22.371	22.58	22.68	22.86	23.12	23.44	23.79	24.16	24.62	25.09	25.50
16	HSR10	MORILE HOMES	4.921	4.99	5.02	5.12	5.17	5.35	5.42	5.56	5.61	5.63	5.61
17	DISCARDS FROM STOCKS (THOU)		318.1	324.	331.	335.	341.	347.	354.	361.	368.	376.	384.
18	DISCARDS1	SINGLE UNITS	268.1	269.	276.	273.	272.	271.	271.	271.	271.	272.	278.
19	DISCARDS2	MORILE HOMES	164.1	182.	205.	230.	259.	287.	313.	336.	352.	363.	366.
20	DISCARD RATES (%)		0.5951	0.592	0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595	0.595
21	DISCARDS3	SINGLE UNITS	1.2141	1.203	1.221	1.204	1.188	1.171	1.155	1.139	1.123	1.106	1.106
22	DISCARDS4	MULTIPLE UNITS	93.021	93.64	94.44	94.99	95.27	95.32	95.37	95.14	94.81	94.54	94.43
23	DISCARDS5	TOTAL OCCUPANCY RATE (%)	5.001	4.75	4.24	3.77	3.38	3.32	3.13	2.95	3.22	3.96	4.72
24	DISCARDS6	RENTAL HOUSING VACANCY RATE (%)	72.601	72.71	72.91	73.07	73.22	73.35	73.42	73.54	73.57	73.57	73.58
25	DISCARDS7	RATIO SINGLE UNITS AND MORILE HOMES TO TOTAL HOUSING UNITS (%)	91.701	91.71	91.77	91.75	91.82	91.71	91.75	91.73	91.81	91.94	92.08
26	DISCARDS8	RATIO OF SINGLE UNITS TO SINGLE UNITS PLUS MORILE HOMES (%)	11.151	6.67	6.18	11.63	16.01	17.23	17.45	19.14	18.91	18.65	18.44
27	DISCARDS9	CHANGE IN BUS. INVENTORIES	-0.701	-0.12	0.25	0.45	0.02	-0.17	0.05	0.17	0.13	0.10	0.10
28	DISCARDS10	FAR	-0.101	0.14	0.04	0.36	0.35	0.72	0.84	0.82	0.60	0.54	0.60
29	DISCARDS11	AUTO-DEALER	6.511	2.97	3.23	6.09	7.99	8.02	7.65	8.68	8.76	8.67	8.80
30	DISCARDS12	INDUSTRY MANUFACTURING	5.051	3.70	2.66	4.73	7.65	8.66	8.91	9.47	9.42	9.33	8.94
31	DISCARDS13	MANUFACTURING	11.851	6.80	5.03	11.18	15.99	17.40	17.40	18.97	18.78	18.55	18.34

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CHARLOTTE APRIAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 5.20 FIXED INVESTMENT, GROWTH RATES

LINE	VAN LAMFL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IRF	I FIXED INVESTMENT	6.51	-1.8	0.4	9.4	9.7	5.5	3.3	6.0	2.3	2.3	1.7
2													
3	IRFH	I NONRESIDENTIAL INVESTMENT	7.91	3.2	2.4	9.3	8.9	6.0	3.8	4.5	2.0	3.4	3.6
4													
5	IAG	I NONRESIDENTIAL INVEST EXCL TRA-	2.61	4.2	5.6	10.1	9.5	6.7	4.4	4.5	2.5	3.7	3.9
6													
7	IAG	FARM	-7.61	6.3	-3.5	17.8	15.7	12.9	9.2	4.0	2.1	2.2	2.4
8	IAG	MINING	-2.11	6.7	10.1	15.5	13.9	6.8	1.8	4.1	4.6	9.4	8.0
9	IAG	TOTAL MANUFACTURING	3.61	5.0	5.2	9.1	8.9	5.5	3.2	4.0	2.2	3.0	2.9
10	IAG	DURABLE GOODS	4.61	8.3	7.1	9.9	8.4	4.0	2.0	4.3	2.5	2.6	2.0
11	IAG	LUMBER	5.01	6.6	1.7	10.6	13.6	11.1	5.3	5.8	3.7	5.5	5.6
12	IAG	FURNITURE	2.61	2.6	5.7	14.3	4.4	1.4	4.6	4.5	0.3	3.7	3.4
13	IAG	STONE, CLAY AND GLASS	3.41	2.0	9.6	8.0	19.5	9.1	1.2	0.1	-0.3	2.9	-0.9
14	IAG	PRIMARY METALS	4.21	9.0	7.9	10.9	6.0	3.6	1.8	4.0	1.6	-0.1	5.0
15	IAG	FABRICATED METAL PRODUCTS	3.51	5.0	2.0	10.5	6.5	5.3	2.9	2.0	-0.0	0.3	2.4
16	IAG	ELECTRICAL MACHINERY	-0.51	12.0	5.7	13.4	10.8	5.1	2.1	2.7	2.7	4.2	4.0
17	IAG	NON-ELECTRICAL MACHINERY	7.01	9.2	6.4	8.0	9.6	5.5	2.6	4.8	2.9	3.4	3.0
18	IAG	MOTOR VEHICLES	6.71	12.0	11.2	7.1	1.4	-5.7	-1.3	8.3	5.5	2.1	-2.1
19	IAG	NON-AUTO TRANS EQ + TRD + MISC	5.91	6.0	5.9	11.6	10.2	6.4	3.1	4.1	2.4	4.6	4.7
20	IAG	INSTRUMENTS	3.61	2.5	8.9	9.6	11.5	7.0	3.3	5.6	4.1	3.6	2.2
21	IAG	NON-DURABLE GOODS	2.81	2.0	3.4	8.4	9.3	7.0	4.4	3.8	1.9	3.5	3.7
22	IAG	FOOD AND BEVERAGES	4.61	0.0	4.5	7.0	1.3	0.6	3.5	7.6	5.8	6.7	7.8
23	IAG	TOBACCO	1.41	0.8	2.0	5.9	5.5	5.2	5.0	4.7	4.5	4.3	4.8
24	IAG	TEXTILES	2.71	1.9	6.8	12.6	13.2	7.6	2.7	3.7	0.7	0.7	0.1
25	IAG	APPAREL	-0.11	0.0	8.2	10.9	9.3	7.4	5.8	7.1	3.8	4.6	4.6
26	IAG	PAPER	6.51	11.7	6.3	7.4	10.3	8.6	5.2	3.9	4.2	4.8	4.6
27	IAG	PRINTING AND PUBLISHING	1.21	-0.1	7.2	7.3	7.9	6.8	5.3	6.6	4.4	5.3	5.6
28	IAG	CHEMICALS	1.11	3.3	7.6	11.2	9.9	9.9	6.9	4.4	2.4	6.0	4.3
29	IAG	PETROLEUM	2.21	-0.5	-0.9	7.0	9.9	6.6	2.9	1.6	-1.3	0.1	1.5
30	IAG	RUBBER	5.11	5.1	7.0	10.4	20.6	7.8	4.6	6.9	6.2	5.1	3.7
31	IAG	LEATHER	-0.41	3.0	9.7	11.0	2.1	6.6	3.3	2.1	-0.5	0.2	0.2
32													
33	IAGT	TRANSPORTATION	10.91	-3.4	1.0	9.0	2.8	0.9	3.0	5.7	4.5	7.2	7.4
34	IAGU49	UTILITIES	3.61	4.5	7.3	7.9	8.1	6.5	4.3	4.7	2.3	3.6	4.5
35	IAGC48	COMMUNICATIONS	6.11	5.5	11.2	12.0	10.2	7.7	4.6	4.3	2.5	4.4	5.1
36	IAGC	COMMERCIAL AND OTHER	15.81	0.6	-3.2	7.4	7.8	4.6	2.9	5.1	0.9	2.8	2.9
37	IAGC	COMMERCIAL	0.71	1.9	6.7	9.3	9.9	7.1	5.2	6.0	3.0	3.8	4.0
38	IRA	CONCEPTUAL DIFF. REA VS NIA	27.61	-0.0	-7.7	6.4	6.7	3.3	1.6	4.5	-0.3	2.1	2.3
39													
40	IRFR	I RESIDENTIAL STRUCTURES	3.21	-13.5	-4.9	9.6	12.2	4.3	1.9	10.6	3.5	-1.0	-3.8
41	IRFR	NONFARM	3.21	-14.1	-5.3	9.9	12.5	4.3	1.8	10.9	3.3	-1.1	-4.1
42	IRFE	FARM	-9.21	8.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	IRFE	RESIDENTIAL DURABLE FURFUP	9.71	-2.4	7.7	7.2	6.7	6.3	5.9	5.6	5.3	5.0	4.8
44	IRFRXIII--H	ADDITIONS FOR ALTERATIONS	-6.61	2.8	5.7	2.6	1.7	-2.3	-1.1	3.9	-2.4	-2.3	-1.7
45													
46	HSPP	I PRIVATE HOUSING STARTS	-0.21	-16.5	-8.1	11.8	16.4	3.5	3.2	8.5	6.1	-1.6	-5.6
47	HSPPS1	B SINGLE UNIT	-4.21	-15.7	-1.9	8.4	16.4	0.9	2.3	10.3	2.8	-2.5	-4.9
48	HSPPS2	B MULTIPLE UNIT	10.51	-18.3	-23.1	22.3	16.6	10.7	5.5	4.0	10.4	0.6	-7.4
49	HSPPS3	I POLY HOUSING HOUSING STARTS	6.31	-16.7	-8.2	11.4	16.6	3.6	3.3	8.5	6.1	-1.6	-5.7
50	HSPPS4	E POLY FARM HOUSING STARTS	-33.81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	HSPPS5	B POLY HOUSING STARTS	-4.21	-5.8	-0.5	16.0	-3.9	48.6	-15.8	20.2	-13.4	-5.2	-6.1

A PRODUCT OF THE CHARLOTTE APRIAL AND INDUSTRY FORECASTING MODEL, DECEMBER 6, 1978. ALL FIGURES ARE OBTAINED FOR SECONDARY DISTRIBUTION.



CHAPTER ANNUAL AND INDUSTRY FORECASTING MODEL  
 HIGH PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 6.10 IMPORTS AND EXPORT DEFICIENCY

LINE	VAR LABEL	I	F	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
---CURRENT DOLLARS (BILL)---															
1	TOTAL	1	1	1	216.3	246.9	272.8	313.5	355.0	394.7	435.4	480.9	532.7	586.4	640.6
2	IMPORTS	1	1	1	175.8	196.5	216.2	248.8	282.4	315.0	348.6	390.4	429.7	473.4	519.0
3	EXPORTS	1	1	1	-3.4	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9	-3.9
4	IMPORTS	1	1	1	172.4	192.6	212.3	244.9	278.5	311.3	344.8	386.5	425.8	469.6	515.1
5	EXPORTS	1	1	1	15.4	15.6	16.6	19.1	19.8	21.3	23.7	26.9	30.1	33.1	36.2
6	IMPORTS	1	1	1	9.7	10.2	11.2	12.9	15.2	16.9	18.6	20.5	22.2	23.9	26.1
7	EXPORTS	1	1	1	43.2	51.0	59.0	68.8	77.8	86.9	96.4	106.2	116.8	128.1	140.3
8	IMPORTS	1	1	1	104.1	115.8	125.6	144.0	165.7	186.2	206.1	232.9	256.7	284.5	312.6
9	EXPORTS	1	1	1	82.9	93.4	101.2	116.2	134.7	152.6	170.6	194.3	215.8	241.2	267.4
10	IMPORTS	1	1	1	21.3	22.3	24.3	27.9	31.0	33.6	35.6	38.7	40.9	43.1	45.2
11	EXPORTS	1	1	1	10.7	11.0	12.0	13.7	15.1	16.2	17.0	18.3	19.1	20.0	20.7
12	IMPORTS	1	1	1	10.5	11.4	12.3	14.2	16.0	17.4	18.6	20.4	21.8	23.2	24.5
13	EXPORTS	1	1	1	45.4	54.1	58.0	66.1	74.1	80.9	88.2	95.9	104.4	114.4	123.2
14	IMPORTS	1	1	1	21.2	25.7	25.8	30.7	34.8	37.8	40.9	43.9	47.3	51.9	55.2
15	EXPORTS	1	1	1	2.2	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
16	IMPORTS	1	1	1	8.3	9.5	10.6	11.5	12.9	14.1	15.5	17.1	18.8	20.5	22.2
17	EXPORTS	1	1	1	3.3	4.0	4.5	5.0	5.4	5.8	6.3	6.9	7.5	8.2	8.9
18	IMPORTS	1	1	1	6.0	9.7	11.3	12.6	14.0	15.6	17.2	19.0	21.0	23.1	25.3
19	EXPORTS	1	1	1	4.7	5.2	5.8	6.4	7.0	7.6	8.3	9.0	9.8	10.7	11.7
20	IMPORTS	1	1	1	6.0	7.2	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
21	EXPORTS	1	1	1	-0.1	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9	-0.9
22	IMPORTS	1	1	1	8.5	7.3	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
23	EXPORTS	1	1	1	-16.7	-0.3	5.6	-2.3	-9.0	-9.2	-11.2	-9.6	0.1	4.6	9.0
24	IMPORTS	1	1	1	98.0	104.3	107.2	115.8	124.0	131.2	138.2	147.1	154.7	163.4	170.8
25	EXPORTS	1	1	1	69.1	70.4	71.3	76.2	81.1	85.5	89.5	95.3	99.5	104.3	108.7
26	IMPORTS	1	1	1	67.8	69.0	70.0	75.0	80.0	84.4	88.5	94.3	98.6	103.5	107.9
27	EXPORTS	1	1	1	7.5	7.4	7.4	7.9	7.6	7.6	7.9	8.5	8.9	9.2	9.5
28	IMPORTS	1	1	1	2.5	2.8	2.5	2.7	3.0	3.1	3.2	3.3	3.4	3.5	3.6
29	EXPORTS	1	1	1	9.2	10.1	10.9	12.0	12.8	13.6	14.3	15.0	15.7	16.4	17.2
30	IMPORTS	1	1	1	48.0	49.1	49.1	52.4	56.6	60.1	63.1	67.5	70.6	74.3	77.6
31	EXPORTS	1	1	1	32.3	35.6	36.2	39.9	43.1	46.0	49.0	52.1	55.4	59.3	62.4
32	IMPORTS	1	1	1	4.7	4.7	4.9	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0
33	EXPORTS	1	1	1	219.4	236.9	254.6	270.8	286.4	300.8	315.0	329.6	344.4	358.9	375.1
34	IMPORTS	1	1	1	254.3	270.0	303.4	326.4	348.1	368.8	389.5	409.7	431.7	453.9	477.6
35	EXPORTS	1	1	1	204.8	210.5	223.2	241.5	260.1	279.1	298.2	318.0	338.2	358.3	379.3
36	IMPORTS	1	1	1	290.1	293.4	309.5	335.0	360.9	387.9	415.3	442.7	471.0	499.3	529.0
37	EXPORTS	1	1	1	148.1	155.5	165.8	179.5	193.2	206.9	220.6	235.3	250.0	264.7	280.0
38	IMPORTS	1	1	1	393.0	419.0	445.2	477.7	511.0	542.9	579.0	615.6	652.0	688.5	727.0
39	EXPORTS	1	1	1	470.4	506.5	538.8	574.9	608.4	641.1	673.2	706.8	742.0	778.8	817.5
40	IMPORTS	1	1	1	214.0	235.7	255.8	274.7	292.6	309.7	326.9	344.9	363.7	382.9	403.0
41	EXPORTS	1	1	1	270.7	301.6	338.7	372.6	402.4	426.5	450.0	474.3	499.4	525.4	552.2
42	IMPORTS	1	1	1	196.2	215.1	229.8	244.0	258.3	273.1	288.3	304.4	321.2	338.2	356.2
43	EXPORTS	1	1	1	140.1	151.4	160.3	165.9	171.7	175.8	179.9	184.1	188.5	192.9	197.4
44	IMPORTS	1	1	1	30.8	35.2	37.2	40.7	43.9	46.8	49.7	52.8	56.0	59.9	63.0
45	EXPORTS	1	1	1	43.0	54.3	60.5	68.6	76.5	85.4	90.6	98.4	106.9	116.9	125.7

ALL FIGURES IN CURRENT DOLLARS, UNLESS OTHERWISE NOTED. PERCENTAGE CHANGES ARE BASED ON 1972=100. PERCENTAGE CHANGES IN CURRENT DOLLARS ARE BASED ON 1972=100. PERCENTAGE CHANGES IN CONSTANT DOLLARS ARE BASED ON 1972=100.

QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
 HIGH-PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 6.20 IMPORTS &amp; EXPORT DEFATORS, GROWTH RATES

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
---CURRENT DOLLARS (MIL)---												
1	1	TOTAL GOODS AND SERVICES										
2	1MGS	15.91	14.2	10.5	14.9	13.2	11.2	10.3	11.4	9.8	10.1	9.3
3	1MGTG10+1	15.91	11.8	10.0	15.1	13.5	11.6	10.6	12.0	10.1	10.2	9.6
4	1MGTG10+1	-10.61	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	1MGTG10+1	16.61	11.7	10.2	15.3	13.7	11.8	10.8	12.1	10.2	10.3	9.7
6	1MGTG10+1	9.01	1.7	6.4	15.2	3.6	7.4	11.1	13.7	11.7	10.1	9.3
7	1MGTG10+1	18.01	4.9	9.2	15.6	17.9	11.2	9.9	10.1	8.7	7.3	9.4
8	1MGTG10+1	-2.21	18.0	15.6	16.7	13.0	11.7	10.9	10.2	9.9	9.7	9.5
9	1MGTG10+1	26.01	11.2	8.5	14.7	15.1	12.3	10.7	11.0	10.2	10.8	9.9
10	1MGTG10+1	32.21	12.8	8.3	14.8	15.9	13.3	11.8	13.9	11.1	11.8	10.9
11	1MGTG10+1	13.91	5.0	9.0	14.5	11.4	8.4	5.8	8.7	5.7	5.8	4.4
12	1MGTG10+1	12.71	2.0	9.8	13.5	10.4	7.4	4.8	7.7	4.7	4.7	3.3
13	1MGTG10+1	15.11	8.2	15.5	12.3	9.3	9.3	6.7	9.6	6.7	6.7	5.3
14	1MGTG10+1	25.01	19.1	7.3	13.9	12.0	9.3	8.9	8.8	8.9	9.6	7.7
15	1MGTG10+1	45.51	21.1	0.3	18.9	13.5	8.7	8.1	7.3	7.7	9.8	6.3
16	1MGTG10+1	38.41	19.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	1MGTG10+1	11.01	14.9	11.7	8.1	12.1	9.5	10.0	10.2	9.9	9.1	8.4
18	1MGTG10+1	15.01	21.3	13.9	10.2	8.4	7.9	8.0	8.9	9.5	8.9	8.4
19	1MGTG10+1	9.71	21.3	16.8	11.9	10.9	11.1	10.3	10.8	10.2	9.2	9.3
20	1MGTG10+1	11.41	12.2	11.5	9.6	9.0	9.0	9.0	9.0	9.0	9.0	9.0
21	1MGTG10+1	14.41	8.9	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
---CONSTANT 1972 DOLLARS---												
22	1	TOTAL GOODS AND SERVICES										
23	1MGS	11.11	5.8	2.8	8.0	7.1	5.9	5.4	6.4	5.1	5.6	4.6
24	1MGTG10+1	9.81	1.9	1.2	7.0	6.4	5.3	4.7	6.4	4.4	4.8	4.2
25	1MGTG10+1	10.51	1.8	1.4	7.2	6.6	5.5	4.9	6.6	4.5	4.9	4.3
26	1MGTG10+1	9.71	-1.1	0.4	6.4	-3.8	0.0	3.9	6.7	5.1	4.0	3.2
27	1MGTG10+1	14.71	-1.6	2.8	7.7	10.2	4.7	3.1	3.5	2.6	1.6	3.6
28	1MGTG10+1	-6.01	9.7	8.7	9.4	6.8	6.0	5.7	5.0	4.7	4.5	4.3
29	1MGTG10+1	14.31	1.0	-0.0	6.8	8.0	6.2	4.9	7.1	4.5	5.3	4.4
30	1MGTG10+1	20.81	10.1	1.6	10.1	8.2	6.8	6.4	6.3	6.4	7.1	5.2
31	1MGTG10+1	10.61	0.7	4.2	-3.4	-3.4	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3
---DEFATORS (1972=100)---												
32	1	TOTAL GOODS AND SERVICES										
33	1MGS	4.31	7.9	7.5	6.4	5.8	5.0	4.7	4.7	4.5	4.2	4.5
34	1MGTG10+1	5.51	9.7	8.7	7.6	6.6	5.9	5.6	5.2	5.4	5.1	5.2
35	1MGTG10+1	0.21	2.8	6.0	8.2	7.7	7.3	6.9	6.6	6.3	5.9	5.9
36	1MGTG10+1	-2.71	1.1	5.5	8.2	7.6	7.1	7.0	6.6	6.4	6.0	5.9
37	1MGTG10+1	4.31	5.0	6.6	8.3	7.6	7.1	6.6	6.7	6.2	5.9	5.8
38	1MGTG10+1	2.91	6.6	6.3	7.3	7.0	6.2	6.6	6.3	5.9	5.6	5.6
39	1MGTG10+1	4.11	7.6	6.4	6.7	5.8	5.4	5.0	5.0	5.0	5.0	5.0
40	1MGTG10+1	12.01	10.2	8.5	7.4	6.5	5.8	5.5	5.5	5.4	5.3	5.2
41	1MGTG10+1	8.01	11.4	12.3	10.0	8.0	6.0	5.5	5.4	5.4	5.3	5.1
42	1MGTG10+1	13.71	9.6	6.8	6.2	5.8	5.8	5.6	5.6	5.5	5.3	5.3
43	1MGTG10+1	3.41	8.2	5.6	3.5	3.5	2.3	2.3	2.3	2.3	2.3	2.3
---DEFATORS (1972=100)---												
44	1MGS	12.61	14.5	5.5	9.6	7.9	6.5	6.2	6.1	6.2	6.9	5.1
45	1MGTG10+1	13.21	23.8	11.3	13.4	11.5	9.0	8.7	8.5	8.6	9.4	7.5

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QUARTERLY ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGH PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 7.00 IMPORTS: FUELS DETAIL

LINE	VAR LABEL	UNIT	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
COAL, COKE, ETC.													
1													
2													
3	THOCT32	E MILLION TONS	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
4	THOCT32	E	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5		% CHANGE											
6	PUMCGT32V	E UNIT PRICE, \$/TON	53.45	54.39	59.50	62.77	66.22	69.87	73.71	77.76	82.04	86.55	91.31
7	PUMCGT32V	E	8.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
8		% CHANGE											
9	THOCT32S	I VALUE, BILL CURRENT \$	0.25	0.27	0.28	0.30	0.31	0.33	0.35	0.37	0.39	0.41	0.43
10	THOCT32S	I	10.2	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
11		% CHANGE											
12	PUMCGT32	I UNIT VALUE INDEX, 1972=100	180.4	190.4	200.9	211.9	223.6	235.8	248.8	262.5	276.9	292.2	308.2
13	PUMCGT32	I	8.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
14		% CHANGE											
15	THOCT32	I VALUE, BILL 72S	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
16	THOCT32	I	1.3	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17		% CHANGE											
CRUDE PETROLEUM													
18													
19													
20	THOCT33	E MILL BARRELS	2204.7	2455.0	2660.0	2899.4	3131.4	3350.6	3568.5	3768.3	3968.1	4166.5	4366.5
21	THOCT33	E	-8.0	11.4	8.4	9.0	8.0	7.0	6.5	5.6	5.3	5.0	4.8
22		% CHANGE											
23	PUMCGT33	E UNIT PRICE, \$/BARREL	14.55	15.71	16.65	17.73	18.80	19.83	20.82	21.86	22.96	24.10	25.31
24	PUMCGT33	E	3.9	8.0	6.0	6.5	6.0	5.5	5.0	5.0	5.0	5.0	5.0
25		% CHANGE											
26	THOCT33S	I VALUE, BILL CURRENT \$	32.08	38.57	44.29	51.41	58.87	66.44	74.30	82.38	91.09	100.43	110.51
27	THOCT33S	I	-4.5	20.2	14.8	16.1	14.5	12.9	11.8	10.9	10.6	10.3	10.0
28		% CHANGE											
29	PUMCGT33	I UNIT VALUE INDEX, 1972=100	452.7	488.8	518.0	551.6	584.9	617.0	647.8	680.2	714.2	749.9	787.4
30	PUMCGT33	I	3.9	8.0	6.0	6.5	6.0	5.5	5.0	5.0	5.0	5.0	5.0
31		% CHANGE											
32	THOCT33	I VALUE, BILL 72S	7.09	7.89	8.55	9.32	10.06	10.77	11.47	12.11	12.75	13.39	14.03
33	THOCT33	I	-8.0	11.4	8.4	9.0	8.0	7.0	6.5	5.6	5.3	5.0	4.8
34		% CHANGE											
REFINED RESIDUAL FUEL & OIL													
35													
36													
37	THOCT3324	E MILL BARRELS	511.0	531.0	550.0	580.2	609.4	639.6	669.8	699.8	729.8	759.8	789.8
38	THOCT3324	E	3.7	3.9	3.6	5.5	5.1	4.9	4.7	4.5	4.3	4.1	3.9
39		% CHANGE											
40	PUMCGT3324	E UNIT PRICE, \$/BARREL	10.60	11.24	11.85	12.47	13.12	13.81	14.54	15.30	16.11	16.96	17.85
41	PUMCGT3324	E	0.2	6.0	5.4	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.3
42		% CHANGE											
43	THOCT3324S	I VALUE, BILL CURRENT \$	5.42	5.97	6.52	7.23	8.00	8.83	9.74	10.71	11.76	12.88	14.10
44	THOCT3324S	I	3.9	10.2	9.2	11.0	10.6	10.4	10.2	10.0	9.8	9.6	9.4
45		% CHANGE											
46	PUMCGT3324	I UNIT VALUE INDEX, 1972=100	583.1	618.3	651.8	685.8	721.7	759.5	799.5	841.6	886.0	932.7	981.8
47	PUMCGT3324	I	0.2	6.0	5.4	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.3
48		% CHANGE											
49	THOCT3324	I VALUE, BILL 72S	0.93	0.97	1.00	1.05	1.11	1.16	1.22	1.27	1.33	1.38	1.44
50	THOCT3324	I	3.7	3.9	3.6	5.5	5.1	4.9	4.7	4.5	4.3	4.1	3.9
51		% CHANGE											

6 PRODUCT OF OILCO (P.O. BOX 3624) 1001 ST. COLIA, NY 13134 OILCO PERMISSUM MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



WHARTON ATRIAL AND INDUSTRY FORECASTING MODEL  
 HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 7.00 IMPORTS FUELS DETAIL

LINE	VAP LABEL	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1		OTHER DEFINED PRODUCTS											
2													
3													
4	TMCGT30T	E MILL MARPETS-----	502.01	314.0	325.0	331.5	338.1	344.9	351.8	358.8	366.0	373.1	380.8
5	TMCGT30T	E % CHANGE-----	0.11	4.0	3.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
6	PUTMCGT30T	E UNIT PRICE, \$/BARREL-----	8.99	9.53	10.05	10.60	11.19	11.80	12.45	13.13	13.86	14.62	15.42
7	PUTMCGT30T	E % CHANGE-----	2.91	6.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
8													
9													
10	TMCGT30T	I VALUE, BILL CURRENT \$-----	2.711	2.99	3.27	3.51	3.78	4.07	4.38	4.71	5.07	5.46	5.87
11	TMCGT30T	I % CHANGE-----	3.11	10.2	9.2	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
12													
13	PTMCGT30T	I UNIT VALUE INDEX, 1972=100-----	483.61	512.6	540.6	570.3	601.7	634.8	669.7	706.6	745.4	786.4	829.7
14	PTMCGT30T	I % CHANGE-----	3.01	6.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
15													
16	TMCGT30T	I VALUE, BILL 72\$-----	0.561	0.58	0.60	0.62	0.63	0.64	0.65	0.67	0.68	0.69	0.71
17	TMCGT30T	I % CHANGE-----	0.11	4.0	3.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
18													
19		NATURAL GAS											
20													
21	TMCGT34	E MILL CUBIC FEET-----	1000.01	1050.0	1100.0	1150.0	1200.0	1250.0	1300.0	1350.0	1400.0	1450.0	1500.0
22	TMCGT34	E % CHANGE-----	-0.91	5.0	33.3	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23													
24	PUTMCGT34	E UNIT PRICE, CTS/THOU CUBIC FEET	277.11	306.2	330.7	354.3	377.9	401.5	425.1	448.7	472.3	495.9	520.7
25	PUTMCGT34	E % CHANGE-----	10.01	10.5	8.0	7.1	6.7	6.2	5.9	5.6	5.3	5.0	5.0
26													
27	TMCGT34\$	I VALUE, BILL CURRENT \$-----	2.771	3.22	4.63	6.38	6.80	7.23	7.65	8.08	8.50	8.93	9.37
28	TMCGT34\$	I % CHANGE-----	9.01	16.0	44.0	37.7	6.7	6.2	5.9	5.6	5.3	5.0	5.0
29													
30	PTMCGT34	I UNIT VALUE INDEX, 1972=100-----	592.21	654.4	706.8	757.2	807.7	858.1	908.6	959.0	1009.4	1059.9	1112.9
31	PTMCGT34	I % CHANGE-----	10.01	10.5	8.0	7.1	6.7	6.2	5.9	5.6	5.3	5.0	5.0
32													
33	TMCGT34	I VALUE, BILL 72\$-----	0.471	0.49	0.66	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
34	TMCGT34	I % CHANGE-----	-0.91	5.0	33.3	28.6	0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST., PHILA., PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE A.10 EXPORTS AND EXPORT DEFATORS

LINE	VAR LABEL	I	T	F	A	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
---CURRENT DOLLARS (BILL)---																
1	TEHS	I				206.4	253.0	283.3	316.1	350.9	390.3	429.0	480.2	517.6	595.9	654.7
2	TEHGS	I				142.1	176.3	196.7	220.2	245.0	275.7	305.5	344.8	386.8	430.1	473.9
3	TEHCS	E				-0.6	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
4	TEHGS	I				141.6	175.9	196.3	219.8	244.6	275.3	305.1	344.4	386.4	429.7	473.5
5	TEHGS	I				21.6	24.2	26.8	29.9	32.3	34.9	38.2	42.0	45.9	50.4	56.4
6	TEHGS	I				0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
7	TEHGS	I				16.9	19.5	19.9	21.7	23.6	26.4	29.3	32.5	35.6	38.6	41.5
8	TEHGS	I				3.6	3.9	3.9	4.4	4.8	5.5	6.2	7.0	7.8	8.7	9.6
9	TEHGS	I				99.5	128.2	145.6	163.9	181.9	208.6	231.9	262.9	297.1	332.0	366.0
10	TEHGS	I				78.9	104.4	119.1	135.5	153.3	174.2	195.5	223.4	253.9	285.2	315.5
11	TEHGS	I				14.8	17.2	19.3	20.9	22.7	24.6	26.7	29.1	31.4	33.7	36.1
12	TEHGS	I				5.8	6.6	7.1	7.5	7.9	9.7	9.2	10.5	11.8	13.1	14.4
13	TEHGS	I				66.0	77.2	86.2	95.1	104.9	113.3	121.9	133.5	148.6	163.3	178.0
14	TEHGS	I				39.7	47.7	53.9	59.3	64.7	68.4	72.0	77.9	87.1	95.5	103.4
15	TEHGS	I				8.8	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
16	TEHGS	I				7.1	6.1	9.0	9.7	10.9	11.8	12.9	14.1	15.5	17.1	18.8
17	TEHGS	I				1.5	1.6	1.9	2.1	2.5	2.9	3.3	3.8	4.3	4.9	5.5
18	TEHGS	I				7.7	9.1	10.0	11.2	12.5	14.0	15.6	17.4	19.3	21.4	23.5
19	TEHGS	I				10.0	10.6	11.4	12.8	14.4	16.2	18.2	20.3	22.4	24.5	26.7
20	TEHGS	I				8.2	9.0	9.9	10.2	10.5	10.8	11.1	11.4	11.7	12.0	12.3
21	TEHGS	I				-1.2	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
22	TEHGS	I				108.3	125.3	133.5	140.1	146.3	152.9	158.6	168.1	179.1	190.0	200.4
23	TEHGS	I				73.5	83.1	86.1	90.7	94.9	100.4	104.8	111.8	119.2	126.5	133.6
24	TEHGS	I				73.3	82.9	85.9	90.5	94.7	100.2	104.6	111.7	119.0	126.4	133.5
25	TEHGS	I				11.5	12.9	14.1	14.9	15.2	15.5	16.0	16.6	17.3	18.4	19.9
26	TEHGS	I				7.5	7.7	7.1	7.2	7.2	7.5	7.8	8.0	8.3	8.6	8.8
27	TEHGS	I				1.5	1.4	1.3	1.3	1.3	1.4	1.5	1.6	1.7	1.8	1.9
28	TEHGS	I				52.8	60.9	63.5	67.2	71.0	75.8	79.4	85.4	91.7	97.7	102.8
29	TEHGS	I				35.0	41.9	46.6	48.5	50.5	51.5	52.7	55.0	58.7	62.1	65.5
30	TEHGS	I				4.4	4.9	5.4	5.2	5.0	4.9	4.8	4.7	4.6	4.6	4.5
31	TEHGS	I				190.6	201.9	212.3	225.6	239.9	255.2	270.5	285.7	300.1	313.7	326.6
32	TEHGS	I				193.3	212.2	228.5	242.8	258.2	274.6	291.6	308.3	324.6	340.0	354.7
33	TEHGS	I				186.4	187.1	190.8	200.1	212.0	225.1	238.4	252.5	264.7	274.0	282.9
34	TEHGS	I				225.7	250.3	282.6	302.4	325.8	351.2	376.9	404.0	429.2	451.0	470.9
35	TEHGS	I				259.1	273.2	306.7	338.5	371.0	394.7	417.6	439.4	461.7	484.4	507.6
36	TEHGS	I				188.4	210.7	229.3	244.1	259.2	275.0	291.6	307.8	323.9	340.0	355.9
37	TEHGS	I				188.4	184.0	184.9	196.1	207.9	219.9	231.4	242.5	253.2	262.8	271.9
38	TEHGS	I				162.3	174.7	188.9	199.6	215.7	229.6	244.5	260.4	277.3	295.2	314.4
39	TEHGS	I				110.5	112.0	111.5	111.5	111.5	111.5	111.6	111.6	111.6	111.6	111.6
40	TEHGS	I				127.5	134.6	141.7	148.0	154.9	161.5	168.5	175.9	183.7	191.8	200.3
41	TEHGS	I				225.7	242.6	259.3	278.2	297.3	316.3	336.6	358.2	380.6	404.1	428.3
42	TEHGS	I				35.0	42.4	47.6	49.6	51.6	52.7	54.0	56.4	60.1	63.6	67.0
43	TEHGS	I				64.8	77.1	87.0	96.2	106.3	115.0	123.9	135.8	151.2	166.2	181.2
44	TEHGS	I				185.1	181.7	182.0	194.2	206.1	218.1	229.7	240.9	251.7	261.4	270.6
---DEFATORS (1972=100)---																
45	TEHGS	I				108.3	125.3	133.5	140.1	146.3	152.9	158.6	168.1	179.1	190.0	200.4
46	TEHGS	I				73.5	83.1	86.1	90.7	94.9	100.4	104.8	111.8	119.2	126.5	133.6
47	TEHGS	I				73.3	82.9	85.9	90.5	94.7	100.2	104.6	111.7	119.0	126.4	133.5
48	TEHGS	I				11.5	12.9	14.1	14.9	15.2	15.5	16.0	16.6	17.3	18.4	19.9
49	TEHGS	I				7.5	7.7	7.1	7.2	7.2	7.5	7.8	8.0	8.3	8.6	8.8
50	TEHGS	I				1.5	1.4	1.3	1.3	1.3	1.4	1.5	1.6	1.7	1.8	1.9
51	TEHGS	I				52.8	60.9	63.5	67.2	71.0	75.8	79.4	85.4	91.7	97.7	102.8
52	TEHGS	I				35.0	41.9	46.6	48.5	50.5	51.5	52.7	55.0	58.7	62.1	65.5
53	TEHGS	I				4.4	4.9	5.4	5.2	5.0	4.9	4.8	4.7	4.6	4.6	4.5
54	TEHGS	I				190.6	201.9	212.3	225.6	239.9	255.2	270.5	285.7	300.1	313.7	326.6
55	TEHGS	I				193.3	212.2	228.5	242.8	258.2	274.6	291.6	308.3	324.6	340.0	354.7
56	TEHGS	I				186.4	187.1	190.8	200.1	212.0	225.1	238.4	252.5	264.7	274.0	282.9
57	TEHGS	I				225.7	250.3	282.6	302.4	325.8	351.2	376.9	404.0	429.2	451.0	470.9
58	TEHGS	I				259.1	273.2	306.7	338.5	371.0	394.7	417.6	439.4	461.7	484.4	507.6
59	TEHGS	I				188.4	210.7	229.3	244.1	259.2	275.0	291.6	307.8	323.9	340.0	355.9
60	TEHGS	I				188.4	184.0	184.9	196.1	207.9	219.9	231.4	242.5	253.2	262.8	271.9
61	TEHGS	I				162.3	174.7	188.9	199.6	215.7	229.6	244.5	260.4	277.3	295.2	314.4
62	TEHGS	I				110.5	112.0	111.5	111.5	111.5	111.5	111.6	111.6	111.6	111.6	111.6
63	TEHGS	I				127.5	134.6	141.7	148.0	154.9	161.5	168.5	175.9	183.7	191.8	200.3
64	TEHGS	I				225.7	242.6	259.3	278.2	297.3	316.3	336.6	358.2	380.6	404.1	428.3
65	TEHGS	I				35.0	42.4	47.6	49.6	51.6	52.7	54.0	56.4	60.1	63.6	67.0
66	TEHGS	I				64.8	77.1	87.0	96.2	106.3	115.0	123.9	135.8	151.2	166.2	181.2
67	TEHGS	I				185.1	181.7	182.0	194.2	206.1	218.1	229.7	240.9	251.7	261.4	270.6

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CHARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 0.20 EXPORTS AND EXPORT OFFFLATORS, GROWTH RATES

LINE	VAR LABEL	I	T	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
---CURRENT DOLLARS (BILL)---															
1	I TOTAL GOODS AND SERVICES				17.61	22.6	12.0	11.6	11.0	11.2	9.9	11.4	12.0	10.9	9.9
2	I TOTAL GOODS				17.61	22.6	12.0	11.6	11.0	11.2	9.9	11.4	12.0	10.9	9.9
3	I MERCHANDISE TOTAL, HOP BASIS				17.61	22.6	12.0	11.6	11.0	11.2	9.9	11.4	12.0	10.9	9.9
4	E DIFF BETWEEN CENSUS & HOP				-78.31	-29.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	I MERCHANDISE TOTAL				20.01	24.2	11.6	12.0	11.3	12.6	10.8	12.9	12.2	11.2	10.2
6	I FOOD & REVERAGES				35.71	11.7	11.1	11.2	8.1	8.2	9.3	10.1	9.3	9.9	11.8
7	I AGRIC EXP UNDER PL 480				-45.71	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	I CRUDE MATERIALS EXCEPT FUELS				19.11	15.8	2.1	8.7	8.9	11.8	11.1	10.8	9.7	8.4	7.6
9	I FUELS				-14.71	10.8	-0.9	11.3	9.6	14.7	13.4	12.3	11.7	11.1	10.6
10	I MANUFACTURED GOODS				18.91	28.9	13.5	12.6	12.2	13.4	11.0	13.6	13.0	11.7	10.2
11	I MANUFACTURED GOODS				19.71	32.4	14.1	13.7	13.2	13.6	12.2	14.3	13.7	12.3	10.6
12	I AIRCRAFT & PARTS, END-USE				22.31	16.1	12.1	8.3	8.4	8.5	8.6	8.7	8.0	7.4	6.9
13	I CIVIL AIRCRAFT & PARTS, END-USE				2.11	14.1	7.5	5.6	5.3	22.7	-5.1	14.1	12.4	11.0	9.9
14	I SERVICES TOTAL				18.01	17.0	11.9	10.4	10.3	7.9	7.6	9.5	11.3	9.9	9.0
15	I RECEIPTS ON US INVEST ABROAD				23.71	20.2	12.9	10.0	9.1	5.8	5.2	8.2	11.8	9.7	8.3
16	I REINVESTED EARNINGS				20.01	-3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	I TRAVEL				16.01	13.8	7.3	11.2	11.9	8.4	9.4	9.6	9.8	10.1	10.3
18	I TRANSPORT, PASSENGER FARES				7.91	10.6	14.9	14.0	16.4	15.9	14.4	14.1	13.8	13.7	13.6
19	I TRANSPORTATION, OTHER				10.01	18.4	10.3	11.9	11.5	12.2	11.2	11.5	10.9	10.9	9.8
20	I OTHER				11.61	6.3	7.5	12.5	12.3	12.3	12.3	12.0	10.2	9.1	9.1
21	I TRANSFER UNDER US MIL AGENCY				15.61	10.1	10.0	2.7	2.9	2.9	2.6	2.7	2.6	2.6	2.5
---CONSTANT 1972 DOLLARS---															
24	I TOTAL GOODS AND SERVICES				10.21	15.8	6.5	5.0	4.4	4.5	3.7	6.0	6.6	6.1	5.5
25	I MERCHANDISE TOTAL, HOP BASIS				8.71	13.0	3.6	5.4	4.6	5.8	4.4	6.7	6.6	6.2	5.6
26	I MERCHANDISE TOTAL				10.71	13.2	3.6	5.4	4.6	5.8	4.4	6.7	6.6	6.2	5.6
27	I FOOD & REVERAGES				26.31	12.5	8.9	6.1	2.0	1.9	3.2	3.9	4.2	3.1	3.0
28	I CRUDE MATERIALS EXCEPT FUELS				17.31	2.8	-8.1	1.6	1.1	3.7	3.5	3.4	3.3	3.1	3.0
29	I FUELS				-23.01	-11.8	0.9	0.9	0.0	7.8	7.2	6.7	7.4	5.9	5.6
30	I MANUFACTURED GOODS				8.21	15.3	4.3	5.8	5.7	6.9	4.6	7.7	7.4	6.5	5.3
31	I SERVICES TOTAL				14.21	19.8	11.2	4.1	4.0	2.1	2.3	4.4	6.6	5.9	5.3
32	I TRANSFER UNDER US MIL AGENCY				11.41	12.8	9.5	-3.1	-2.9	-2.7	-2.3	-2.0	-1.7	-1.2	-0.9
---OFFLATORS (1972=100)---															
35	I TOTAL GOODS AND SERVICES				6.71	5.9	5.1	6.3	6.3	6.4	6.0	5.6	5.0	4.5	4.1
36	I MERCHANDISE TOTAL				6.51	9.8	7.7	6.3	6.4	6.4	6.2	5.7	5.3	4.7	4.3
37	I FOOD & REVERAGES				7.41	-0.7	2.0	4.9	6.0	6.2	5.9	5.9	4.8	3.5	3.2
38	I CRUDE MATERIALS				1.61	12.6	11.2	7.0	7.7	7.8	7.3	7.2	6.2	5.1	4.4
39	I FUELS				10.81	18.2	12.3	10.4	9.6	6.4	5.8	5.2	5.1	4.9	4.6
40	I MANUFACTURED GOODS				9.91	11.8	8.8	6.5	6.2	6.1	6.0	5.5	5.1	5.0	4.7
41	I SERVICES & OFFENSE				4.01	-2.4	0.5	6.0	6.0	5.7	5.2	4.8	4.4	3.8	3.5
---ADJUSTMENTS---															
44	I CPI ADJ AVE IN 7 COUNTRIES				12.41	7.6	8.2	5.6	8.1	6.5	6.5	6.5	6.5	6.5	6.5
45	I EX RATE 7 COUNTRY AVE ADJ				9.51	1.4	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	I GDP PER CAPITA 7 COUNTRY AVE ADJ				5.61	5.6	5.3	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
47	I WORLD TRADE, PRICE INDEX				8.51	7.5	6.9	7.3	6.8	6.4	6.4	6.4	6.3	6.2	6.0
48	I EXPORT SERVICES & OTHER (1972 F)				9.41	21.2	12.2	4.2	4.1	2.2	2.4	4.5	4.5	5.9	5.3
49	I EXPORT SERVICES & OTHER (CPI ADJ)				12.71	18.4	12.9	10.6	10.5	8.1	7.8	9.6	11.3	10.0	9.0
50	I EXPORT SERVICES & OTHER (CPI ADJ)				3.01	-1.8	0.7	6.2	6.1	5.8	5.3	4.9	4.5	3.9	3.5

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QUARTERLY ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 9.00 IP INDICES, CONSUMER AND WHOLESALE PRICE INDICES (1967=100)

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
CONSUMER PRICE INDICES											
1 ALL ITEMS	195.31	211.4	227.1	243.6	260.9	279.0	297.1	315.1	332.1	348.3	363.7
2 PC	7.41	8.2	7.5	7.2	7.1	6.9	6.5	6.0	5.4	4.9	4.4
3 PC											
4 PC											
5 FUND	211.21	225.8	242.3	255.7	271.2	288.2	305.6	323.8	340.6	355.6	369.2
6 PCCF	9.91	6.9	7.3	5.5	6.1	6.3	6.1	5.9	5.2	4.4	3.8
7 PCCF											
8 PCS	210.91	230.5	250.2	267.1	285.2	304.9	325.0	344.9	365.0	385.4	405.3
9 PCS	8.51	9.3	8.6	6.7	6.8	6.9	6.6	6.1	5.8	5.6	5.2
10 PCSR	164.01	176.7	189.9	200.6	213.3	227.9	243.4	260.5	279.4	297.2	312.0
11 PCSR	6.81	7.7	7.5	5.6	6.4	6.8	6.8	7.0	7.3	6.4	5.0
12											
13											
WHOLESALE PRICE INDICES											
14 ALL COMMUNITIES	208.01	222.1	236.6	249.7	264.1	278.1	292.2	307.2	321.6	334.8	347.6
15 PW	7.61	6.3	6.5	5.5	5.8	5.3	5.1	5.1	4.7	4.1	3.8
16 PW											
17											
18 TOTAL MANUFACTURES, BY DURABILITY	203.91	217.4	229.2	243.4	257.9	273.0	289.2	305.6	321.4	336.2	350.6
19 PWMF	7.21	6.4	5.5	6.2	5.9	5.9	5.9	5.7	5.2	4.6	4.3
20 PWPF	194.61	208.7	222.5	234.4	247.3	260.2	273.3	286.8	300.1	312.5	324.6
21 PWPF	7.71	7.3	6.6	5.3	5.5	5.2	5.0	5.0	4.6	4.2	3.9
22 PWPF	192.61	206.0	219.1	230.3	242.4	254.5	266.7	279.5	291.9	303.4	314.5
23 PWPF	7.61	7.0	6.3	5.1	5.3	5.0	4.8	4.8	4.4	4.0	3.6
24 PWPF	199.21	215.4	231.7	247.3	262.4	277.8	293.6	309.4	325.2	340.5	355.6
25 PWPF	7.91	8.2	7.5	6.7	6.1	5.9	5.7	5.4	5.1	4.7	4.4
26 PWPC	239.41	252.0	269.5	285.2	305.4	326.6	348.7	373.6	396.1	414.1	429.6
27 PWPC	11.71	5.2	6.9	5.8	7.1	7.0	6.8	7.1	6.0	4.6	3.8
28 PWPI	214.81	227.2	242.0	255.1	269.5	282.3	295.4	309.1	322.4	335.0	347.6
29 PWPI	6.51	5.8	6.5	5.4	5.6	4.8	4.6	4.6	4.3	3.9	3.7
30											
FRB INDUSTRIAL PRODUCTION INDEX											
31											
32											
33 IP	145.01	151.3	155.8	164.1	172.9	180.5	187.0	195.3	202.3	208.9	215.2
34 IP	5.71	4.4	3.0	5.3	5.4	4.4	3.6	4.4	3.6	3.3	3.0
35											
36 IPMF	145.01	152.3	157.1	164.8	173.5	180.9	187.1	195.1	201.7	208.0	213.9
37 IPMF	6.11	4.8	3.1	4.9	5.3	4.3	3.4	4.3	3.4	3.1	2.8
38 IPMF	139.11	146.7	151.5	160.5	170.7	178.7	184.7	193.3	199.6	205.3	210.5
39 IPMF	7.41	5.4	3.3	6.0	6.3	4.7	3.4	4.6	3.3	2.8	2.5
40 IPMF	154.51	160.5	165.1	171.0	177.5	184.0	190.5	197.7	204.9	211.9	218.8
41 IPMF	4.31	3.9	2.9	3.5	3.8	3.7	3.5	3.7	3.6	3.5	3.2
42 IPMF+49	141.11	143.5	146.9	158.0	168.7	177.7	185.8	196.5	206.2	215.7	224.9
43 IPMF+49	3.61	1.7	2.4	7.6	6.7	5.4	4.6	5.7	4.9	4.6	4.2
44 IPMF	123.71	124.3	125.3	134.4	142.5	148.8	154.0	161.9	168.3	174.5	180.5
45 IPMF	5.01	0.5	0.8	7.3	6.0	4.4	3.5	5.1	4.0	3.7	3.4
46 IPMF+49	160.41	165.0	171.1	184.3	197.8	209.9	221.3	235.1	248.4	261.7	274.4
47 IPMF+49	2.51	2.9	3.7	7.7	7.4	6.1	5.4	6.2	5.6	5.4	4.8

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ADAPTATION ANNUAL AND INDUSTRY FORECASTING MODEL  
 HIGH-PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 10.10 REAL OUTPUT (1972 \$)

	I T F M													
	I ALL INDUSTRIES													
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988			
1	1384.3	1416.7	1449.2	1514.2	1581.0	1637.7	1685.9	1750.7	1803.6	1855.4	1905.1			
II AGRIC. FORESTRY AND FISHERIES														
2	34.9	35.0	35.1	36.9	38.7	40.1	41.2	42.7	44.1	45.5	47.0			
III MINING														
3	20.8	21.6	22.3	23.5	24.9	25.9	26.8	28.1	29.1	30.1	31.1			
IV METAL MINING														
4	1.2	1.2	1.3	1.4	1.5	1.6	1.6	1.6	1.7	1.7	1.8			
5	3.7	3.8	3.9	4.2	4.5	4.7	4.9	5.2	5.4	5.6	5.8			
6	13.3	13.9	14.4	15.1	16.0	16.6	17.2	18.0	18.6	19.3	19.9			
7	2.6	2.6	2.7	2.8	2.9	3.0	3.1	3.3	3.4	3.5	3.6			
VIII MANUFACTURING														
8	142.4	156.9	169.5	189.9	211.9	228.4	241.2	260.8	274.8	288.0	300.3			
IX DURABLE GOODS														
9	203.4	213.0	221.3	234.9	249.9	260.3	267.8	280.3	288.3	295.7	302.4			
10	139.0	143.9	148.2	155.0	162.1	168.1	173.4	180.5	186.5	192.3	197.8			
XI TRANSPORTATION														
11	53.1	53.7	53.9	56.4	59.1	61.4	63.2	65.8	67.9	69.8	71.6			
XII COMMUNICATIONS														
12	46.0	48.7	51.6	57.1	58.5	61.9	64.7	68.3	72.1	76.2	81.1			
XIII UTILITIES														
13	32.1	32.9	33.9	35.6	37.5	38.9	40.2	41.7	43.2	44.7	45.9			
XIV COMMERCIAL AND OTHER														
14	686.7	697.1	709.0	737.9	769.8	797.1	821.1	852.5	878.2	903.7	927.8			
XV I COMMERCIAL														
15	678.3	687.4	698.1	727.1	759.1	786.3	810.4	841.2	866.1	890.8	914.1			
16	57.8	55.5	54.0	56.7	60.1	61.9	62.7	65.0	65.4	65.7	66.0			
XVII FINANCE, INSURANCE & REAL ESTATE														
17	214.5	221.3	225.8	233.0	241.8	250.3	258.4	267.6	275.9	284.3	292.4			
18	161.0	165.3	168.1	172.8	179.1	185.1	191.0	197.5	203.5	209.5	215.3			
XIX OTHER FINANCE														
19	53.6	56.2	57.6	60.2	62.8	65.2	67.4	70.0	72.4	74.8	77.0			
XX SERVICES														
20	168.9	167.4	170.7	178.1	185.9	192.9	199.6	207.5	214.6	221.9	229.0			
XXI WHOLESALE AND RETAIL TRADE														
21	237.0	243.2	247.6	259.3	271.2	281.2	289.7	301.1	310.1	318.9	326.8			
XXII RETAIL TRADE														
22	142.0	145.6	147.6	154.2	161.0	166.9	172.0	178.7	183.9	189.0	193.5			
XXIII WHOLESALE TRADE														
23	95.0	97.6	100.0	105.1	110.2	114.3	117.8	122.4	126.2	129.9	133.3			
XXIV REST OF WORLD														
24	8.0	9.6	10.9	10.8	10.8	10.8	10.7	11.2	12.2	12.9	13.7			
XXV I GOVERNMENT														
25	168.3	170.9	173.9	176.8	180.6	184.1	187.4	190.8	194.1	197.3	200.5			
XXVI GENERAL GOVERNMENT														
26	149.9	152.9	156.4	158.5	161.4	164.2	166.9	169.6	172.4	175.1	177.9			
XXVII FEDERAL ENTERPRISES														
27	8.0	8.6	8.4	8.6	8.9	9.1	9.3	9.5	9.7	9.8	10.0			
XXVIII STATE AND LOCAL ENTERPRISES														
28	9.6	9.4	9.1	9.7	10.2	10.7	11.2	11.7	12.0	12.4	12.7			
XXIX DUMMY INDUSTRIES														
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
XXX IMPORTS OF GOODS AND SERVICES														
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
XXXI INVENTORY VALUATION ADJUSTMENT														
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

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WHARTON AGRICAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 10.10 REAL OUTPUT (1972 \$)

LINE	VAR LABEL	I T F P	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	XVGMF	I MANUFACTURING	342.01	350.9	364.5	369.9	411.9	428.4	441.2	460.8	474.8	488.0	500.3
2	XVGMF	I DURABLE GOODS	203.01	213.4	221.3	234.9	249.9	260.3	267.8	280.3	288.3	295.7	302.4
3	XVGMFD24	R LUMBER	10.01	10.4	11.0	11.7	12.5	13.1	13.5	14.1	14.7	15.3	15.9
4	XVGMFD25	B FURNITURE	5.21	5.4	5.7	6.0	6.4	6.7	7.0	7.4	7.7	8.0	8.2
5	XVGMFD32	B STONE, CLAY AND GLASS	10.81	11.3	11.7	12.1	12.7	13.1	13.5	14.1	14.5	14.8	15.2
6	XVGMFD33	B PRIMARY METALS	20.81	21.8	22.6	23.9	25.3	25.9	26.0	26.8	26.9	26.8	26.8
7	XVGMFD34	B FABRICATED METAL PRODUCTS	21.01	21.9	22.8	24.0	25.4	26.4	26.9	28.0	28.6	29.1	29.5
8	XVGMFD35	B NONFABRICATED METAL PRODUCTS	37.01	39.4	41.6	44.7	48.1	50.3	51.9	54.4	55.9	57.3	58.5
9	XVGMFD36	B ELECTRICAL MACHINERY	32.71	34.9	35.6	37.8	40.2	42.2	43.9	46.2	47.9	49.6	51.3
10	XVGMFD37	B MOTOR VEHICLES	34.81	35.4	37.0	39.5	42.3	44.2	45.6	48.1	49.6	51.0	52.1
11	XVGMFD38	B INSTRUMENTS	9.11	9.6	10.0	10.6	11.2	11.7	12.2	12.8	13.2	13.7	14.1
12	XVGMFD39	B NONAUTO TRANS EQ + UTD + MISC	21.41	22.8	23.2	24.5	25.8	26.6	27.3	28.4	29.3	30.1	30.8
13	XVGMFD40	B NONAUTO TRANS EQUIP + UTD	15.91	17.0	17.4	18.4	19.3	19.9	20.3	21.2	21.7	22.3	22.8
14	XVGMFD41	B MISCELLANEOUS MANUFACTURING	5.41	5.7	5.9	6.1	6.4	6.7	7.0	7.3	7.6	7.8	8.0
15	XVGMF	I NONDURABLE GOODS	139.01	143.9	148.2	155.0	162.1	168.1	173.4	180.5	186.5	192.3	197.8
16	XVGMFN20	B FOOD AND BEVERAGES	32.71	33.5	33.6	34.7	35.8	36.7	37.5	38.4	39.3	40.1	40.9
17	XVGMFN21	B TOBACCO	4.91	5.0	5.1	5.4	5.6	5.8	6.0	6.3	6.6	6.9	7.1
18	XVGMFN22	B TEXTILES	10.01	10.4	10.6	11.2	11.8	12.3	12.7	13.3	13.8	14.2	14.6
19	XVGMFN23	B APPAREL	12.51	12.9	13.4	14.0	14.7	15.2	15.7	16.4	16.9	17.5	18.0
20	XVGMFN24	B PAPER	12.81	13.3	13.8	14.5	15.3	16.0	16.6	17.4	18.1	18.7	19.3
21	XVGMFN25	B PRINTING AND PUBLISHING	16.91	17.7	18.7	19.4	20.2	20.9	21.6	22.4	23.1	23.7	24.4
22	XVGMFN26	B CHEMICALS	27.21	28.1	29.1	30.5	32.1	33.6	34.8	36.6	38.1	39.6	41.1
23	XVGMFN27	B PETROLEUM	9.01	9.4	9.7	10.2	10.6	11.0	11.2	11.7	12.0	12.4	12.7
24	XVGMFN28	B RUBBER	10.71	11.1	11.6	12.4	13.2	13.8	14.3	15.0	15.6	16.1	16.6
25	XVGMFN29	B LEATHER	2.41	2.5	2.6	2.7	2.8	2.9	2.9	3.0	3.1	3.1	3.2
26	XVGMF	I TRANSPORTATION	53.11	53.7	53.9	56.4	59.1	61.4	63.2	65.8	67.9	69.8	71.6
27	XVGMGT41	B LOCAL AND HIGHWAY PASSENGER	2.91	2.7	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6
28	XVGMGT42	B MOTOR FREIGHT AND WAREHOUSING	24.21	24.6	24.9	26.0	27.3	28.3	29.2	30.4	31.3	32.1	32.8
29	XVGMGT43	B RAILROADS	9.41	9.9	10.0	10.5	11.0	11.3	11.6	12.0	12.3	12.6	12.8
30	XVGMGT44	B WATER	3.31	3.3	3.3	3.4	3.5	3.6	3.7	3.9	4.0	4.2	4.3
31	XVGMGT45	B AIR	9.91	10.2	10.3	10.9	11.5	12.1	12.6	13.3	13.9	14.4	14.9
32	XVGMGT46	B PIPELINE	1.21	1.2	1.2	1.2	1.3	1.4	1.4	1.5	1.6	1.6	1.7
33	XVGMGT47	B TRANSPORTATION SERVICES	1.81	1.8	1.8	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.5

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



UNION ANNUAL AND INDUSTRY FORECASTING MODEL  
 WIDER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

LINE VAR LABEL		TABLE 10,20 REAL OUTPUT, GROWTH RATES											
		1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	
1	ALL INDUSTRIES	3.0	2.5	2.3	4.5	4.4	3.6	2.9	3.8	3.0	2.9	2.7	
2	AGRIC. FORESTRY AND FISHERIES	-9.0	0.4	0.2	5.3	4.8	3.6	2.8	3.6	3.2	3.2	3.3	
3	MINING	4.9	3.5	3.3	5.5	5.7	4.2	3.4	4.9	3.7	3.5	3.3	
4	METAL MINING	6.7	-0.5	5.4	8.6	8.4	4.5	1.2	3.8	1.5	2.1	4.9	
5	COAL MINING	5.9	4.2	3.4	6.6	6.8	5.2	4.3	5.6	4.4	3.9	3.5	
6	CRUDE PETROLEUM AND NATURAL GAS	4.3	4.6	3.1	5.3	5.4	4.1	3.3	4.7	3.7	3.5	3.0	
7	MINING OF METALLIC MINERALS	5.6	-1.5	3.2	3.9	4.7	3.9	3.4	4.9	4.1	3.5	3.5	
8	MANUFACTURING	6.2	4.2	3.5	5.5	5.7	4.0	3.0	4.4	3.0	2.8	2.5	
9	DURABLE GOODS	6.6	4.7	3.9	6.1	6.4	4.2	2.9	4.7	2.9	2.6	2.3	
10	NONDURABLE GOODS	5.8	3.5	3.0	4.6	4.6	3.7	3.2	4.1	3.3	3.1	2.9	
11	TRANSPORTATION	2.2	1.2	0.4	4.6	4.9	3.8	3.0	4.1	3.2	2.8	2.5	
12	COMMUNICATIONS	9.4	6.1	5.9	10.6	2.3	5.8	4.5	5.6	5.6	5.8	6.4	
13	UTILITIES	6.8	2.1	3.0	5.2	5.1	3.8	3.5	3.8	3.6	3.4	2.7	
14	COMMERCIAL AND OTHER	4.8	1.5	1.7	4.1	4.3	3.5	3.0	3.8	3.0	2.9	2.7	
15	COMMERCIAL	4.7	1.3	1.6	4.2	4.4	3.6	3.1	3.8	3.0	2.9	2.6	
16	CONTRACT CONSTRUCTION	3.8	-4.0	-2.7	5.0	6.1	3.0	1.3	3.7	0.6	0.5	0.5	
17	FINANCE, INSURANCE & REAL ESTATE	4.5	3.2	2.0	3.2	3.8	3.5	3.2	3.5	3.1	3.0	2.8	
18	REAL ESTATE & COMBINATIONS OFFICES	5.1	2.7	1.7	2.8	3.6	3.4	3.2	3.4	3.0	2.9	2.8	
19	OTHER FINANCE	3.0	4.9	2.6	4.5	4.3	3.8	3.5	3.9	3.4	3.3	3.0	
20	SERVICES	6.2	-0.9	-2.0	4.3	4.4	3.8	3.4	4.0	3.4	3.4	3.2	
21	WHOLESALE AND RETAIL TRADE	4.0	2.6	1.8	4.7	4.6	3.7	3.1	3.9	3.0	2.8	2.5	
22	RETAIL TRADE	5.6	2.5	1.4	4.5	4.4	3.6	3.1	3.9	2.9	2.8	2.4	
23	WHOLESALE TRADE	1.7	2.7	2.5	5.1	4.9	3.7	3.0	4.0	3.1	2.9	2.6	
24	REST OF WORLD	14.3	14.9	13.1	-0.5	-0.7	0.7	-1.2	4.7	8.3	6.4	6.0	
25	GOVERNMENT	1.6	1.5	1.8	1.6	2.2	1.9	1.8	1.8	1.7	1.6	1.6	
26	GENERAL GOVERNMENT	1.8	2.0	2.3	1.3	1.9	1.7	1.7	1.6	1.6	1.6	1.6	
27	FEDERAL ENTERPRISES	-2.8	-2.7	-3.0	3.3	3.3	2.5	1.8	2.3	1.6	1.4	1.6	
28	STATE AND LOCAL ENTERPRISES	1.7	-1.5	-3.0	5.7	5.9	5.0	4.2	4.3	3.3	2.8	2.2	

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CHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
MID-LEVEL PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 10.20 REAL OUTPUT, GROWTH RATES

LINE	VAR LABEL	I	J	F	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	XVGPF	I			6.2	4.2	3.5	5.5	5.7	4.0	3.0	4.4	3.0	2.8	2.5
2															
3	XVGMEF	I			6.6	4.7	3.9	6.1	6.4	4.2	2.9	4.7	2.9	2.6	2.3
4															
5	XVGMEF24	R			8.0	4.0	5.2	6.7	7.3	4.6	3.1	4.0	4.6	4.1	4.0
6	XVGMEF25	R			5.4	4.1	5.1	4.6	6.5	5.0	4.6	6.5	4.0	3.2	2.3
7	XVGMEF32	R			4.0	4.7	3.8	3.3	4.7	3.5	2.6	4.7	2.7	2.8	2.1
8	XVGMEF33	R			3.4	4.7	3.8	5.8	5.8	2.5	0.5	3.0	0.4	-0.5	-0.1
9	XVGMEF34	R			4.5	4.6	3.8	5.6	5.8	3.6	2.2	4.0	2.0	1.8	1.5
10	XVGMEF35	R			7.7	5.0	5.6	7.3	7.5	4.7	3.1	4.9	2.6	2.5	2.1
11	XVGMEF36	R			8.5	6.6	2.1	6.1	6.4	5.0	4.1	5.2	3.7	3.6	3.4
12	XVGMEF37	R			8.8	1.7	4.6	6.8	6.9	4.5	3.2	5.4	3.2	2.9	2.2
13	XVGMEF38	R			4.8	5.5	3.7	5.8	6.1	4.5	3.6	5.0	3.7	3.4	3.1
14	XVGMEF39	R			4.9	6.6	2.0	5.6	5.1	3.2	2.5	4.2	2.9	2.7	2.5
15	XVGMEF40	R			5.5	7.0	2.0	5.9	5.2	2.9	2.2	4.0	2.6	2.6	2.4
16	XVGMEF41	R			3.1	5.5	2.0	4.8	5.1	4.2	3.5	4.8	3.7	3.1	2.8
17															
18	XVGMEF	I			5.8	3.5	3.0	4.6	4.6	3.7	3.2	4.1	3.3	3.1	2.9
19															
20	XVGMEF20	R			4.8	2.5	0.3	3.2	3.1	2.6	2.2	2.5	2.2	2.1	2.0
21	XVGMEF21	R			3.4	2.2	2.4	4.5	4.4	4.0	3.4	4.9	4.4	4.1	3.6
22	XVGMEF22	R			4.6	3.6	2.6	5.3	5.2	4.2	3.6	4.7	3.5	3.0	2.8
23	XVGMEF23	R			9.3	3.5	3.3	4.8	4.6	3.8	3.4	4.1	3.4	3.3	3.1
24	XVGMEF26	R			7.4	4.5	3.5	5.4	5.5	4.4	3.6	4.8	4.0	3.4	3.2
25	XVGMEF27	R			7.1	5.0	5.4	4.1	4.1	3.4	3.0	3.8	3.1	2.9	2.7
26	XVGMEF28	R			6.5	3.4	3.5	5.0	5.2	4.5	3.8	5.0	4.2	3.9	3.6
27	XVGMEF29	R			3.5	3.8	4.0	4.4	4.3	3.3	2.6	3.8	3.0	2.9	2.6
28	XVGMEF30	R			3.1	3.4	5.0	6.5	6.4	4.7	3.6	5.1	3.6	3.4	2.9
29	XVGMEF31	R			6.6	5.6	3.2	3.1	2.9	2.5	2.2	2.8	2.4	2.3	2.1
30															
31	XVGRT	I			2.2	1.2	0.4	4.6	4.9	3.8	3.0	4.1	3.2	2.8	2.5
32															
33	XVGRT41	R			-14.1	-6.4	-6.0	0.3	1.1	0.7	0.0	1.0	0.4	0.2	-0.2
34	XVGRT42	R			4.4	1.7	1.0	4.5	4.9	3.8	3.0	4.1	3.0	2.6	2.3
35	XVGRT43	R			0.3	0.5	1.1	4.7	4.9	3.2	2.0	3.8	2.6	2.1	1.8
36	XVGRT44	R			4.8	1.0	-1.2	3.6	3.7	3.1	2.3	4.1	3.8	3.4	3.0
37	XVGRT45	R			3.7	2.8	0.8	5.8	5.8	5.1	4.4	5.0	4.4	4.0	3.7
38	XVGRT46	R			-1.0	1.0	-1.4	6.8	6.2	4.9	3.9	4.8	4.1	3.7	3.3
39	XVGRT47	R			5.2	1.8	0.1	4.3	5.1	4.3	3.6	4.6	3.8	3.3	2.8

A PRODUCT OF CHARTON EFA, INC., 3620 MARKET ST., PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

QUARTERLY ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

LINE	VAR LABEL	I T F A	TABLE 11.10 REAL OUTPUT PER PERSON (1972 \$ / PERSON)										1988
			1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	
1	GNPPP	ALL INDUSTRIES	14.7	14.7	14.8	15.0	15.3	15.6	15.8	16.2	16.5	16.7	17.0
2													
3	XAGPP	FARM	10.5	11.1	11.4	11.8	12.2	12.5	12.8	13.3	13.8	14.4	14.9
4													
5	XMGPP	MINING	24.1	24.3	25.6	27.7	29.5	30.8	31.8	33.0	33.7	34.3	35.0
6													
7	XMEPP	MANUFACTURING	16.9	17.2	17.6	18.3	19.0	19.6	20.1	20.8	21.3	21.9	22.4
8													
9	XMFDP	DURABLE GOODS	16.8	17.1	17.5	18.1	18.7	19.2	19.6	20.2	20.7	21.2	21.6
10													
11	XMF24PP	LUMBER	15.0	15.5	16.3	17.0	17.7	18.1	18.2	18.6	19.1	19.5	19.9
12	XMF25PP	FURNITURE	9.8	10.0	10.3	10.6	11.0	11.4	11.7	12.2	12.5	12.8	12.9
13	XMF32PP	STONE, CLAY AND GLASS	15.6	15.7	15.9	16.2	16.7	17.0	17.3	17.8	18.1	18.4	18.7
14	XMF33PP	PRIMARY METALS	16.6	17.1	17.5	18.1	18.6	18.8	18.9	19.3	19.5	19.6	19.8
15	XMF34PP	FABRICATED METAL PRODUCTS	13.7	13.9	14.1	14.4	14.8	15.0	15.2	15.6	15.8	16.1	16.4
16	XMF35PP	NON-ELECTRICAL MACHINERY	16.4	16.8	17.1	17.7	18.3	18.7	18.9	19.4	19.7	20.1	20.5
17	XMF36PP	ELECTRICAL MACHINERY	16.0	16.4	16.5	17.2	18.0	18.7	19.4	20.2	20.9	21.6	22.4
18	XMF37PP	MOTOR VEHICLES	36.1	35.8	36.8	38.4	40.5	42.1	43.6	46.0	47.8	49.9	52.0
19	XMF37SP2PP	NON-AUTO TRANSPORT & ORD & MISC MFD	13.8	14.2	14.3	14.8	15.2	15.5	15.8	16.3	16.6	17.0	17.4
20	XMF38PP	INSTRUMENTS	16.5	16.8	17.1	17.7	18.4	18.9	19.4	20.1	20.6	21.1	21.6
21													
22	XMFNPP	NON-DURABLE GOODS	17.0	17.4	17.9	18.7	19.5	20.2	20.9	21.7	22.4	23.1	23.8
23													
24													
25	XMF20PP	FOOD AND BEVERAGE	18.7	19.5	19.8	20.7	21.7	22.7	23.6	24.5	25.3	25.9	26.5
26	XMF21PP	TOBACCO	6.7	7.1	7.3	7.6	8.0	8.4	8.8	9.3	9.8	10.3	10.8
27	XMF22PP	TEXTILES	10.1	10.4	10.6	11.2	11.7	12.1	12.4	13.0	13.3	13.7	14.1
28	XMF23PP	APPAREL	9.6	9.9	10.1	10.6	11.1	11.6	12.0	12.6	13.2	13.8	14.4
29	XMF26PP	PAPER	17.9	18.4	18.8	19.6	20.4	21.2	21.8	22.8	23.6	24.4	25.3
30	XMF27PP	PRINTING AND PUBLISHING	15.0	15.4	16.1	16.5	17.1	17.4	17.7	18.1	18.4	18.7	18.9
31	XMF28PP	CHEMICALS	25.4	26.1	26.9	28.5	30.2	31.6	32.9	34.6	36.1	37.5	38.9
32	XMF29PP	PETROLEUM	42.7	43.1	44.0	46.1	48.3	50.3	52.2	54.9	57.5	60.2	63.0
33	XMF30PP	RUBBER	15.6	15.8	16.2	16.8	17.4	17.7	18.0	18.5	18.9	19.2	19.6
34	XMF31PP	LEATHER	8.8	9.0	9.1	9.4	9.7	10.0	10.3	10.7	11.1	11.5	11.8
35													
36	XRGPP	REGULATED INDUSTRIES	27.9	28.3	29.1	30.6	31.5	32.6	33.5	34.6	35.4	36.3	37.5
37													
38	XRGTP	TRANSPORTATION	19.7	19.6	19.6	20.2	20.7	21.1	21.4	21.9	22.2	22.4	22.7
39													
40	XRGCP	COMMUNICATIONS	36.8	38.7	41.1	43.5	45.0	47.5	49.7	51.8	53.3	55.2	58.0
41													
42	XRGH9PP	UTILITIES	41.9	42.2	43.7	46.4	49.0	51.0	52.6	54.5	56.7	59.0	61.2
43													
44	XCCPP	COMMERCIAL AND OTHER	13.9	13.7	13.6	13.7	13.8	13.9	14.1	14.3	14.5	14.7	14.8
45	XCCPP	CONTRACT CONSTRUCTION	13.6	12.7	12.2	12.0	12.1	12.1	12.1	12.5	12.7	12.9	13.0
46	XFTPP	FINANCE, INSURANCE & REAL ESTATE	45.3	45.1	44.7	44.4	44.8	45.6	46.4	47.3	48.2	49.0	49.7
47	XSVPP	SERVICES	10.5	10.1	10.0	10.0	10.1	10.2	10.2	10.3	10.4	10.5	10.6
48	XVRPP	WHOLESALE AND RETAIL TRADE	12.4	12.4	12.5	12.7	12.9	13.0	13.2	13.4	13.6	13.8	13.9
49													
50	XGVPP	GOVERNMENT	10.8	10.7	10.7	10.7	10.8	10.9	10.9	11.0	11.0	11.0	11.1

A PRODUCT OF QUARTERLY, INC., 4624 MARKET ST., PHILA., PA 19104. WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
 HIGH PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

LINE	VAR LABEL	I T F A	TABLE 11.20 REAL OUTPUT PER PERSON, % CHANGE										
			1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GNPPP	---	-0.21	0.1	0.5	1.8	2.0	1.6	1.4	2.3	1.7	1.6	1.5
2		---											
3	XAGPP	---	-10.81	5.0	3.0	4.1	2.9	2.5	2.7	3.8	3.9	3.9	3.9
4		---											
5	XMGPP	---	1.01	0.5	6.5	7.4	6.3	4.3	3.4	3.8	2.2	1.8	1.9
6		---											
7	XMEPP	---	2.51	2.1	2.2	3.9	3.9	2.9	2.5	3.5	2.6	2.6	2.5
8		---											
9	XMFPP	---	1.31	1.6	2.0	3.6	3.6	2.4	2.1	3.2	2.3	2.3	2.3
10		---											
11	XMF24PP	---	3.91	3.2	5.3	4.4	4.2	2.0	0.8	2.0	2.6	2.1	2.2
12	XMF25PP	---	1.01	1.9	3.0	3.1	4.1	3.0	3.0	3.9	3.2	1.7	1.1
13	XMF23PP	---	-2.01	0.4	1.3	2.0	2.8	2.0	1.8	3.0	1.5	1.7	1.9
14	XMF23PP	---	-0.61	2.7	2.7	3.2	2.7	1.0	0.5	2.3	0.8	0.7	1.1
15	XMF24PP	---	-1.01	1.7	1.3	2.6	2.5	1.5	1.3	2.5	1.4	1.7	1.7
16	XMF25PP	---	2.91	2.1	2.1	3.6	3.5	1.7	1.5	2.5	1.6	1.9	1.9
17	XMF26PP	---	2.71	2.4	0.6	4.5	4.5	3.8	3.6	4.2	3.4	3.6	3.6
18	XMF27PP	---	0.51	-0.8	3.0	4.3	5.4	3.8	3.6	5.3	4.1	4.0	4.0
19	XMF27SP2PP	---	0.41	1.0	1.0	3.1	2.8	2.1	2.1	3.0	2.2	2.3	2.3
20	XMF28PP	---	-0.21	1.7	1.6	3.7	3.8	3.0	2.6	3.5	2.6	2.5	2.3
21		---											
22		---											
23	XMFNP	---	4.21	2.8	2.6	4.4	4.4	3.7	3.3	4.0	3.2	3.1	2.9
24		---											
25	XMF20PP	---	3.31	4.0	1.5	4.5	5.0	4.7	4.1	5.8	3.0	2.5	2.3
26	XMF21PP	---	2.61	2.6	2.4	4.9	5.0	4.8	4.4	5.8	5.4	5.2	4.8
27	XMF22PP	---	3.21	2.9	2.8	4.9	4.5	3.5	3.1	4.0	3.0	2.7	2.7
28	XMF23PP	---	8.01	2.7	3.0	4.6	4.6	4.2	4.1	4.9	4.4	4.4	4.5
29	XMF26PP	---	5.21	2.6	2.4	4.2	4.4	3.5	3.1	4.4	3.7	3.4	3.5
30	XMF27PP	---	5.71	2.9	4.1	2.9	3.1	2.2	1.7	2.2	1.6	1.5	1.3
31	XMF28PP	---	5.41	2.7	3.0	6.1	5.8	4.8	4.2	5.1	4.2	3.9	3.7
32	XMF29PP	---	2.51	0.9	2.2	4.7	4.8	4.1	3.8	5.2	4.7	4.7	4.6
33	XMF30PP	---	1.21	1.6	2.4	3.8	3.2	2.0	1.6	2.9	1.9	2.0	1.9
34	XMF31PP	---	2.91	2.5	1.3	3.0	3.2	3.2	3.3	3.8	3.3	3.2	3.4
35		---											
36	XRGPP	---	3.11	1.6	2.9	5.0	3.2	3.4	2.8	3.1	2.5	2.4	3.3
37		---											
38	XRGTP	---	1.71	-0.6	-0.2	3.1	2.8	1.8	1.5	2.4	1.3	0.8	1.5
39		---											
40	XRG4APP	---	2.11	5.1	6.2	5.8	3.6	5.5	4.6	4.1	2.9	3.6	5.1
41		---											
42	XRG49PP	---	3.51	0.8	3.6	6.0	5.7	4.0	3.2	3.5	4.1	4.0	3.7
43		---											
44	XCCPP	---	-0.21	-1.3	-0.5	0.3	1.1	0.9	0.9	1.8	1.4	1.2	0.9
45	XCCPP	---	-6.01	-6.8	-4.0	-1.5	0.9	-0.0	0.0	3.4	1.7	1.4	0.8
46	XFLPP	---	-0.51	-0.4	-1.0	-0.7	0.9	1.7	1.7	2.1	1.8	1.7	1.5
47	XSVPP	---	1.31	-4.3	-0.3	-0.1	0.9	0.7	0.5	1.2	0.9	0.8	0.7
48	XHPP	---	-0.21	-0.3	0.5	1.8	1.8	1.1	0.9	1.9	1.4	1.3	1.0
49		---											
50	XGVPP	---	-1.11	-0.4	-0.7	0.6	0.8	0.5	0.5	0.5	0.1	0.3	0.3

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QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 12.10 ANNUAL OUTPUT (CURRENT \$)

LINE	VAR LABEL	T	F	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GDP	I	ALL INDUSTRIES	2105.712308.1	2509.9	2805.0	3131.2	3463.8	3793.7	4175.6	4533.5	4888.3	5239.0	
2	XVGMEN	I	SUM OF ANNUAL OUTPUTS	2103.612305.1	2506.9	2802.0	3128.2	3460.8	3790.7	4172.7	4530.5	4885.3	5236.0	
3	SDS	E	STATISTICAL DISCREPANCY	2.27	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
4	XVGCAS	I	AGRIC, FORESTRY AND FISHERIES	62.1	63.9	68.6	75.5	84.7	94.6	104.6	117.4	129.1	138.8	147.4
5	XVGNCS	I	MINING	63.3	76.7	88.5	103.4	119.3	135.0	149.5	166.3	182.5	198.1	216.3
6	XVGNFS	I	MANUFACTURING	510.1	567.8	619.6	692.5	770.5	844.5	916.7	1005.5	1084.9	1161.2	1241.5
7	XVGMEN	I	DURABLE GOODS	314.0	351.0	388.6	441.1	498.2	550.5	600.4	663.6	718.5	773.0	827.2
8	XVGMEN24	I	LUMBER	16.4	17.7	19.2	21.2	23.8	26.5	29.0	32.6	36.3	39.6	43.2
9	XVGMEN25	I	FURNITURE	7.9	8.7	9.6	10.5	11.6	12.7	13.7	15.1	16.1	17.2	18.2
10	XVGMEN26	I	STONE, CLAY AND GLASS	17.6	19.5	21.4	24.1	26.4	28.1	29.9	32.5	34.6	36.8	38.6
11	XVGMEN27	I	PRIMARY METALS	36.5	40.8	44.2	49.4	55.4	60.4	64.4	69.4	73.2	76.2	79.2
12	XVGMEN28	I	FABRICATED METAL PRODUCTS	35.9	39.9	43.5	49.6	56.0	62.0	67.7	74.8	80.7	86.6	92.2
13	XVGMEN29	I	ELECTRICAL MACHINERY	60.6	67.9	76.7	88.2	101.6	113.7	125.2	139.8	152.5	165.4	178.1
14	XVGMEN30	I	NON-ELECTRICAL MACHINERY	48.3	54.9	60.4	68.7	77.0	84.6	92.1	101.0	108.8	116.6	124.7
15	XVGMEN31	I	MOTOR VEHICLES	44.2	48.6	55.2	63.8	73.5	82.6	91.3	102.8	112.9	123.3	133.4
16	XVGMEN32	I	INSTRUMENTS	12.6	14.2	15.6	17.5	19.5	21.4	23.3	25.8	27.9	30.1	32.3
17	XVGMEN33	I	NON-AUTO TRANS EQ + ORD + MISC	34.0	39.0	42.7	48.0	53.5	58.6	63.7	70.0	75.6	81.4	87.3
18	XVGMEN34	I	NON-AUTO TRANS EQUIP + ORG	26.3	30.3	33.3	37.5	41.7	45.5	49.4	54.2	58.4	62.8	67.3
19	XVGMEN35	I	MISCELLANEOUS MANUFACTURING	7.7	8.7	9.5	10.5	11.7	13.0	14.3	15.8	17.2	18.6	20.0
20	XVGMEN	I	NON-DURABLE GOODS	196.2	216.7	231.0	251.4	272.4	294.0	316.3	341.9	366.4	390.2	414.3
21	XVGMEN20	I	FOOD AND BEVERAGES	44.2	47.9	50.1	52.4	55.0	58.2	61.5	65.4	69.4	73.4	77.7
22	XVGMEN21	I	TOBACCO	6.0	6.6	7.1	7.7	8.3	8.9	9.6	10.3	11.1	11.8	12.5
23	XVGMEN22	I	TEXTILES	14.0	15.4	16.5	18.2	20.0	21.9	23.9	26.1	28.2	30.2	32.9
24	XVGMEN23	I	APPAREL	15.3	16.8	17.9	19.6	21.5	23.5	25.6	27.6	29.6	31.4	33.2
25	XVGMEN24	I	PAPER	20.1	22.8	24.7	27.0	29.6	32.5	35.4	38.5	41.6	44.7	47.8
26	XVGMEN25	I	PRINTING AND PUBLISHING	25.1	27.9	29.8	32.9	36.1	39.6	43.2	47.2	51.2	55.3	59.4
27	XVGMEN26	I	CHEMICALS	40.1	44.5	47.5	52.0	56.1	59.9	63.9	69.0	73.6	78.0	82.4
28	XVGMEN27	I	PETROLEUM	13.3	14.8	15.8	17.6	19.2	20.7	22.1	23.8	25.2	26.7	28.1
29	XVGMEN28	I	RUBBER	15.0	16.6	18.0	20.0	22.1	24.1	26.2	28.7	30.9	32.9	35.0
30	XVGMEN29	I	LEATHER	3.1	3.4	3.6	3.9	4.3	4.6	4.9	5.3	5.6	5.8	6.1
31	XVGCOS	I	COMMERCIAL AND OTHER	1026.0	1120.6	1216.5	1365.6	1536.3	1711.2	1884.0	2080.7	2264.2	2446.6	2625.8
32	XVGCOS	I	TRANSPORTATION	77.7	82.9	87.7	94.6	102.5	111.0	119.9	130.0	140.4	151.7	162.6
33	XVGCOS	I	UTILITIES	52.9	58.1	64.7	73.0	81.1	89.1	97.8	108.1	118.0	127.8	136.7
34	XVGCOS	I	COMMUNICATIONS	55.4	59.8	64.7	72.8	76.0	81.9	87.3	94.0	101.2	109.2	118.2
35	XVGCOS	I	GOVERNMENT AND GOV. ENTERPRISES	255.6	275.4	296.5	324.5	357.7	393.5	430.9	470.7	510.2	549.0	587.6
36	XVGCOS	I	FEDERAL GOVERNMENT	226.6	245.4	265.7	290.0	318.5	349.5	382.2	416.6	451.0	485.1	519.8
37	XVGCOS	I	FEDERAL ENTERPRISES	15.4	15.8	16.4	18.3	20.6	22.9	25.3	28.1	30.8	33.3	35.1
38	XVGCOS	I	STATE AND LOCAL ENTERPRISES	13.5	14.2	14.6	16.3	18.6	21.0	23.4	26.0	28.3	30.6	32.6

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CHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 12.20 NOMINAL OUTPUT, GROWTH RATES

LINE	VAR LABEL	I	J	F	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GOPS	I			11.6	9.5	8.7	11.8	11.6	10.6	9.5	10.1	8.6	7.6	7.2
2															
3	XVGSDP	I			11.7	9.6	8.8	11.8	11.6	10.6	9.5	10.1	8.6	7.8	7.2
4															
5	XVGAGS	I			10.4	2.8	7.4	10.2	12.2	11.6	10.6	12.3	9.9	7.5	6.2
6															
7	XVGGNS	I			27.3	21.3	15.4	16.8	15.3	13.2	10.7	11.2	9.8	9.1	8.6
8															
9	XVGMFS	I			13.0	11.3	9.1	11.8	11.3	9.6	8.6	9.7	7.9	7.2	6.7
10															
11	XVGMFD	I			15.4	11.8	10.7	13.5	12.9	10.5	9.1	10.5	8.3	7.6	7.0
12	XVGMFD24	I			15.3	7.7	8.8	10.3	12.1	11.2	9.6	12.4	11.1	9.2	8.9
13	XVGMFD25	I			16.6	10.0	10.4	9.7	10.0	9.2	8.5	9.7	6.7	6.9	6.0
14	XVGMFD32	I			20.1	10.4	10.2	12.4	9.6	6.4	6.5	8.6	6.5	5.9	5.4
15	XVGMFD33	I			7.3	11.7	8.4	11.8	12.1	9.1	6.5	7.7	5.5	4.1	3.9
16	XVGMFD34	I			16.6	10.9	9.2	14.0	12.8	10.7	9.3	10.5	7.9	7.3	6.5
17	XVGMFD35	I			17.2	12.2	12.9	15.0	15.1	12.0	10.1	11.6	9.1	8.4	7.7
18	XVGMFD36	I			18.7	13.7	10.0	13.7	12.1	9.8	8.9	9.7	7.7	7.2	7.0
19	XVGMFD37	I			17.3	9.9	13.6	15.6	15.3	12.4	10.5	12.6	9.8	9.2	8.2
20	XVGMFD38	I			8.9	12.7	10.3	12.0	11.2	9.8	9.2	10.3	8.1	7.9	7.3
21	XVGMFD39	I			13.1	14.7	9.6	12.4	11.3	9.5	8.8	9.9	8.1	7.6	7.2
22	XVGMFD39P1	I			13.6	15.3	9.7	12.8	11.2	9.2	8.4	9.7	7.9	7.4	7.2
23	XVGMFD39S	I			11.5	12.6	9.2	11.1	11.8	10.8	9.9	10.6	9.0	8.0	7.6
24															
25	XVGMFS	I			9.3	10.5	6.6	8.8	8.3	8.0	7.6	8.1	7.2	6.5	6.2
26	XVGMFN20	I			7.9	8.5	4.4	4.6	5.0	5.7	5.8	6.3	6.2	5.7	5.8
27	XVGMFN21	I			6.8	10.4	6.6	8.5	8.3	7.9	7.2	7.9	7.1	6.6	6.2
28	XVGMFN22	I			8.5	10.0	7.6	10.1	9.9	9.7	9.2	9.2	8.0	6.9	6.0
29	XVGMFN23	I			12.6	9.3	6.9	9.6	9.6	9.3	8.7	7.9	7.2	6.2	5.6
30	XVGMFN26	I			10.8	13.5	8.4	9.3	9.6	9.8	8.9	8.7	8.0	7.4	7.0
31	XVGMFN27	I			11.8	11.3	6.7	10.6	9.7	9.5	9.2	9.3	8.4	7.9	7.5
32	XVGMFN28	I			9.9	11.2	6.7	9.5	8.0	6.8	6.6	7.9	6.7	6.0	5.7
33	XVGMFN29	I			7.2	11.0	7.2	11.2	9.3	7.6	6.8	7.5	6.3	5.6	5.5
34	XVGMFN30	I			6.2	10.5	8.1	11.6	10.5	9.1	8.5	9.7	7.4	6.7	6.3
35	XVGMFN31	I			9.3	9.6	5.4	8.8	8.6	7.6	6.9	6.9	5.8	5.1	5.1
36															
37	XVGCUS	I			11.2	9.2	8.6	12.3	12.5	11.4	10.1	10.4	8.8	8.1	7.3
38															
39	XVGRGT	I			9.9	6.7	5.8	7.8	8.3	8.3	8.0	8.4	8.0	8.1	7.2
40															
41	XVGRGU49	I			12.9	9.8	11.4	12.7	11.2	9.8	9.8	10.5	9.2	8.2	7.0
42															
43	XVGRCC48	I			12.2	7.8	8.2	12.6	4.4	7.8	6.5	7.7	7.7	7.9	8.3
44															
45	XVGRVS	I			8.6	7.7	7.7	9.5	10.2	10.0	9.5	9.2	8.4	7.6	7.0
46															
47	XVGRVGS	I			9.0	8.3	8.3	9.1	9.8	9.8	9.3	9.0	8.3	7.6	7.2
48	XVGRVFF	I			10.0	2.9	3.3	11.5	12.6	11.5	10.2	11.2	9.8	8.0	5.6
49	XVGRVSE	I			1.7	4.3	2.4	13.2	14.1	12.9	11.3	10.9	9.0	7.9	6.7

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MARTIN ANNUAL AND INDUSTRY FORECASTING MODEL  
WICHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 13.10 EMPLOYMENT (THOUSANDS)

LINE	VAR LABEL	I	T	F	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IDENT	I	ALL INDUSTRIES		94257	106580	98070	100338	103017	105019	106605	108247	109636	110987	112310
2	3 MENA	R	MANUFACTURING		3310	1165	3081	3118	3173	3204	3211	3203	3182	3161	3142
3	4 MEETMIG	R	MANUFACTURING		862	888	863	848	843	843	843	851	864	874	890
5	6 MEETMIG	I	MANUFACTURING		20266	120692	20964	21289	21648	21882	21980	22178	22268	22104	22299
7	7 MEETMIG	I	MANUFACTURING		12075	120441	12677	12987	13333	13565	13670	13660	13942	13975	13974
8	8 MEETMIG20	R	LUMBER		667	672	672	687	707	726	742	756	771	786	800
9	9 MEETMIG25	R	FURNITURE		534	545	556	565	578	588	597	612	616	625	633
10	10 MEETMIG32	R	STONE, CLAY AND GLASS		692	721	739	746	762	773	779	792	801	807	810
11	11 MEETMIG33	R	PRIMARY METALS		1251	1276	1289	1320	1359	1380	1379	1388	1383	1367	1351
12	12 MEETMIG34	R	FABRICATED METAL PRODUCTS		1531	1575	1615	1664	1719	1755	1770	1795	1805	1806	1804
13	13 MEETMIG35	R	NONMETALLIC MINERAL PRODUCTS		2290	2354	2433	2521	2620	2696	2738	2800	2833	2851	2857
14	14 MEETMIG36	R	ELECTRICAL MACHINERY		2044	2127	2159	2193	2233	2259	2269	2289	2295	2295	2291
15	15 MEETMIG37	R	MOTOR VEHICLES		965	988	1005	1029	1044	1049	1045	1046	1036	1021	1004
16	16 MEETMIG37SP2	R	NONAUTO TRANS ED + DRD + MISC		1547	1607	1624	1663	1701	1720	1726	1747	1759	1768	1772
17	17 MEETMIG39	R	MISCELLANEOUS MANUFACTURING		437	444	455	471	488	499	506	516	522	524	524
18	18 MEETMIG37SP1	R	NONAUTO TRANS ED + DRD		1110	1163	1169	1191	1213	1220	1220	1231	1237	1243	1248
19	19 MEETMIG372.9	R	NONAUTO TRANS ED		948	994	1000	1028	1056	1070	1075	1089	1098	1106	1112
20	20 MEETMIG19	R	ORDNANCE MANUFACTURING		162	169	168	164	156	151	145	141	139	137	137
21	21 MEETMIG38	R	INSTRUMENTS		554	574	586	598	611	620	626	635	642	647	652
22	22 MEETMIG	I	NONDURABLE GOODS		1892	1925	1925	1925	1925	1925	1925	1925	1925	1925	1925
23	23 MEETMIG20	R	FOOD AND BEVERAGES		1745	1719	1698	1677	1648	1615	1587	1567	1555	1548	1544
24	24 MEETMIG21	R	TOBACCO		70	70	70	70	70	70	68	68	67	66	66
25	25 MEETMIG22	R	TEXTILES		904	1000	998	1002	1009	1016	1021	1027	1032	1035	1036
26	26 MEETMIG23	R	APPAREL		1303	1313	1317	1320	1320	1316	1307	1298	1285	1271	1254
27	27 MEETMIG26	R	PAPER		713	726	734	742	751	757	760	764	765	765	763
28	28 MEETMIG27	R	PRINTING AND PUBLISHING		1125	1147	1162	1175	1187	1202	1217	1235	1253	1272	1289
29	29 MEETMIG28	R	CHEMICALS		1069	1076	1081	1070	1065	1061	1058	1057	1051	1057	1056
30	30 MEETMIG29	R	PETROLEUM		211	217	221	221	220	218	215	212	209	205	201
31	31 MEETMIG30	R	RUBBER		688	701	718	737	759	779	794	812	825	836	845
32	32 MEETMIG31	R	LEATHER		274	282	287	287	287	285	282	279	277	274	271
33	33	I	REGULATED INDUSTRIES		4789	4782	4789	4881	4917	4975	5016	5088	5174	5259	5300
34	34 MEETMIG	R	TRANSPORTATION		2691	2742	2757	2797	2855	2910	2952	3002	3058	3119	3150
35	35 MEETMIG49	R	UTILITIES		768	780	775	769	764	763	763	766	762	758	751
36	36 MEETMIG48	R	COMMUNICATIONS		1250	1261	1257	1315	1298	1302	1300	1319	1353	1382	1399
38	38	I	COMMERCIAL AND OTHER		4949	50933	52053	54012	55716	57154	58369	59513	60486	61487	62549
39	39 MEETMIG	I	COMMERCIAL		44129	45528	46388	48211	49781	51128	52282	53360	54243	55136	56072
40	40 MEETMIG	R	CONTRACT CONSTRUCTION		4245	4370	4429	4721	4965	5116	5180	5197	5141	5095	5079
41	41 MEETMIG	R	FINANCE, INSUR, REAL ESTATE		4735	4906	5054	5251	5400	5492	5574	5651	5726	5802	5879
42	42 MEETMIG	R	SERVICES		1682	17644	17033	17791	18408	18973	19527	20062	20569	21089	21620
43	43 MEETMIG	R	WHOLESALE AND RETAIL TRADE		10667	119608	19869	20448	21009	21540	22001	22450	22807	23151	23494
44	44 MEETMIG	R	SELF-EMPLOYED WORKERS, INDIAN		6279	6435	6697	6807	6917	7006	7084	7169	7269	7311	7482
45	45 MEETMIG	R	UNPAID FAMILY WORKERS, INDIAN		478	470	470	470	470	470	470	470	470	470	470
46	46 MEETMIGS-ET	R	CONCEPTUAL DIFF, NO VS ESTAB		-1389	-1500	-1500	-1476	-1452	-1450	-1467	-1487	-1496	-1490	-1475
48	48	I	GOVERNMENT		15612	15920	16320	16490	16718	16958	17187	17415	17662	17898	18130
49	49 MEETMIG	R	FEDERAL		2757	2770	2770	2776	2783	2791	2800	2810	2822	2834	2846
50	50 MEETMIG	R	STATE AND LOCAL		12854	13150	13550	13714	13936	14167	14387	14605	14840	15084	15283

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CHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 FICHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 13.20 EMPLOYMENT, GROWTH RATES

LINE	VAR LABEL	I T F M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	UENT	I ALL INDUSTRIES	4.11	2.3	1.8	2.6	2.4	1.9	1.5	1.5	1.3	1.2	1.2
2													
3	NEHA	B FARM	2.01	-4.4	-2.7	1.2	1.8	1.1	0.1	-0.3	-0.6	-0.7	-0.6
4	NEFTMG	B MINING	3.81	3.0	-2.8	-1.8	-0.6	-0.1	0.0	1.0	1.5	1.7	1.4
5													
6	NEETMF	I MANUFACTURING	3.61	2.1	1.3	1.5	1.7	1.1	0.4	0.9	0.4	0.2	-0.0
7	NEETMFD	I DURABLE GOODS	5.21	3.0	1.9	2.4	2.7	1.7	0.8	1.4	0.6	0.2	-0.0
8	NEETMFD24	B LUMBER	3.91	0.7	-0.0	-2.3	2.9	2.6	2.3	1.9	1.9	1.9	1.8
9	NEETMFD25	B FURNITURE	4.71	2.2	2.0	1.5	2.3	1.8	1.5	2.5	0.7	1.5	1.2
10	NEETMFD32	A STONE, CLAY AND GLASS	6.01	4.2	2.5	1.3	1.8	1.4	0.8	1.7	1.1	0.7	0.4
11	NEETMFD33	A PRIMARY METALS	4.01	2.0	1.0	2.4	3.0	1.5	-0.1	0.7	-0.4	-1.2	-1.2
12	NEETMFD34	B FABRICATED METAL PRODUCTS	5.51	2.9	2.6	3.0	3.3	2.1	0.8	1.4	0.6	0.1	-0.2
13	NEETMFD35	A NONELECTRICAL MACHINERY	4.71	2.8	3.3	3.6	3.9	2.9	1.5	2.3	1.2	0.6	0.2
14	NEETMFD36	A ELECTRICAL MACHINERY	5.61	4.1	1.5	1.6	1.8	1.1	0.5	0.9	0.2	0.0	-0.2
15	NEETMFD371	B MOTOR VEHICLES	6.31	2.5	1.6	2.4	1.4	0.5	-0.4	0.1	-0.9	-1.4	-1.7
16	NEETMFD37SP2	B NONAUTO TRANS EQ + OPD + MISC	4.51	3.9	1.0	-2.4	2.3	1.1	0.4	1.2	0.7	0.5	0.3
17	NEETMFD39	B MISCELLANEOUS MANUFACTURING	4.51	1.7	2.4	3.6	3.6	2.3	1.3	2.0	1.2	0.4	-0.0
18	NEETMFD37SP1	B NONAUTO TRANS EQ + UTD	4.51	4.8	0.5	1.9	1.8	0.6	0.0	0.9	0.5	0.5	0.4
19	NEETMFD372.9	B NONAUTO TRANS EQ	4.51	4.8	0.7	2.7	2.8	1.3	0.5	1.3	0.8	0.7	0.5
20	NEETMFD39	B ORDNANCE MANUFACTURING	4.51	4.6	-0.7	-2.8	-4.4	-3.7	-3.5	-2.7	-1.9	-1.1	-0.4
21	NEETMFD3A	B INSTRUMENTS	5.01	3.7	2.1	2.0	2.2	1.5	1.0	1.4	1.1	0.9	0.7
22	NEETMFD3A	I NONDURABLE GOODS	1.51	0.7	0.4	0.2	0.2	0.0	-0.1	0.1	0.1	0.0	-0.1
23	NEETMFD20	B FOOD AND BEVERAGES	1.41	-1.5	-1.2	-1.2	-1.8	-2.0	-1.8	-1.2	-0.8	-0.5	-0.3
24	NEETMFD21	B TOBACCO	0.71	-0.4	-0.1	-0.4	-0.6	-0.8	-0.0	-0.9	-1.0	-1.1	-1.2
25	NEETMFD22	B TEXTILES	1.31	0.6	-0.2	0.4	0.7	0.7	0.5	0.6	0.5	0.3	0.1
26	NEETMFD23	B APPAREL	1.21	0.8	0.3	0.2	0.0	-0.3	-0.7	-0.7	-0.9	-1.1	-1.3
27	NEETMFD26	B PAPER	2.11	1.8	1.1	1.1	1.1	0.8	0.5	0.4	0.2	-0.0	-0.3
28	NEETMFD27	B PRINTING AND PUBLISHING	1.41	2.0	1.3	1.1	1.0	1.2	1.3	1.5	1.5	1.5	1.4
29	NEETMFD28	B CHEMICALS	1.11	0.7	0.5	-1.0	-0.5	-0.3	-0.4	-0.1	0.0	-0.1	-0.1
30	NEETMFD29	B PETROLEUM	0.91	2.9	1.8	-0.3	-0.5	-0.8	-1.1	-1.3	-1.6	-1.8	-2.0
31	NEETMFD30	B RUBBER	1.91	1.8	2.5	2.6	3.0	2.6	2.0	2.2	1.7	1.3	1.0
32	NEETMFD31	B LEATHER	3.51	3.0	1.9	0.1	-0.3	-0.7	-1.1	-1.0	-0.9	-1.0	-1.0
33													
34	NEETRG	I REGULATED INDUSTRIES	2.61	1.5	0.2	1.9	0.7	1.2	0.8	1.4	1.7	1.6	0.8
35	NEETRG1	B TRANSPORTATION	0.51	1.9	0.6	1.5	2.1	2.0	1.4	1.7	1.9	2.0	1.0
36	NEETRG49	B UTILITIES	3.21	1.5	-0.6	-0.8	-0.6	-0.2	0.1	0.4	-0.5	-0.6	-1.0
37	NEETRG48	B COMMUNICATIONS	7.11	0.9	-0.3	4.6	-1.3	0.3	-0.1	1.5	2.6	2.1	1.3
38													
39	NEETCN	I COMMERCIAL AND OTHER	5.01	2.9	2.2	3.8	3.2	2.6	2.1	2.0	1.6	1.7	1.7
40	NEETCA	I COMMERCIAL	5.11	3.2	1.9	3.9	3.3	2.7	2.3	2.1	1.7	1.6	1.7
41	NEETCC	B CONTRACT CONSTRUCTION	10.41	2.9	1.4	6.6	5.2	3.0	1.3	0.3	-1.1	-0.9	-0.3
42	NEETFI	B FINANCE, INSUR, REAL ESTATE	5.01	3.6	3.0	3.9	2.8	1.7	1.5	1.4	1.3	1.3	1.3
43	NEETSV	B SERVICES	4.41	3.5	2.3	4.4	3.5	3.1	2.9	2.7	2.5	2.5	2.5
44	NEETMR	B WHOLESALE AND RETAIL TRADE	4.21	2.8	1.3	2.9	2.7	2.6	2.1	2.0	1.6	1.5	1.5
45	NEEMSE	F SELF-EMPLOYED WORKERS, MANAG	4.61	2.5	4.1	1.6	1.6	1.3	1.1	1.2	1.4	1.4	1.5
46	NEEMUF	F UNPAID FAMILY WORKERS, MANAG	-2.81	-1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	NEEMUS-E1	E CONCESSIONAL OFF, OR US ESTAB	3.91	8.0	0.0	-1.6	-1.6	-0.1	1.2	1.3	0.6	-0.4	-1.0
48													
49	LEETGV	I GOVERNMENT	2.81	2.0	2.5	1.0	1.4	1.4	1.4	1.3	1.4	1.3	1.3
50	LEETGVF	B FEDERAL	1.11	0.5	0.0	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4
51	LEETGV5	B STATE AND LOCAL	3.11	2.3	3.0	1.2	1.6	1.7	1.6	1.5	1.6	1.5	1.5

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QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 14.10 POPULATION AND LABOR FORCE (MILLIONS)

LINE VAR LABEL	I	T	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 NPT	1	TOTAL POPULATION			218,512	220,31	222,24	224,29	226,43	228,60	230,79	232,98	235,17	237,33	239,48
2 NPT00.04	1	TOTAL POPULATION, AGES 00 - 04			15,161	15,68	16,09	16,69	17,33	17,95	18,48	18,88	19,15	19,33	19,45
3 NPT05.09	1	TOTAL POPULATION, AGES 05 - 09			16,891	16,49	16,10	15,57	15,42	15,54	15,86	16,26	16,86	17,51	18,12
4 NPT10.14	1	TOTAL POPULATION, AGES 10 - 14			18,581	18,06	17,80	17,82	17,64	17,36	16,96	16,56	16,03	15,87	15,98
5 NPT15.19	1	TOTAL POPULATION, AGES 15 - 19			21,061	20,91	20,60	20,01	19,40	18,78	18,26	18,00	18,02	17,84	17,57
6 NPT20.24	1	TOTAL POPULATION, AGES 20 - 24			20,451	20,72	20,90	21,10	21,07	20,96	20,81	20,49	19,91	19,31	18,70
7 NPT25.29	1	TOTAL POPULATION, AGES 25 - 29			18,041	18,44	18,92	19,31	19,76	20,13	20,39	20,57	20,75	20,72	20,62
8 NPT30.34	1	TOTAL POPULATION, AGES 30 - 34			15,891	16,56	17,24	18,14	18,08	18,40	18,80	19,28	19,67	20,12	20,49
9 NPT35.39	1	TOTAL POPULATION, AGES 35 - 39			13,061	13,59	14,04	14,29	15,43	15,92	16,58	17,28	18,16	18,10	18,40
10 NPT40.44	1	TOTAL POPULATION, AGES 40 - 44			11,321	11,51	11,69	11,98	12,41	13,13	13,66	14,10	14,36	15,49	15,94
11 NPT45.49	1	TOTAL POPULATION, AGES 45 - 49			11,361	11,21	11,03	11,00	11,05	11,16	11,35	11,53	11,81	12,23	12,94
12 NPT50.54	1	TOTAL POPULATION, AGES 50 - 54			11,821	11,72	11,67	11,54	11,40	11,25	11,10	10,93	10,90	10,95	11,06
13 NPT55.59	1	TOTAL POPULATION, AGES 55 - 59			11,241	11,36	11,39	11,40	11,31	11,26	11,16	11,11	11,00	10,86	10,71
14 NPT60.64	1	TOTAL POPULATION, AGES 60 - 64			9,431	9,57	9,80	10,00	10,28	10,47	10,59	10,61	10,63	10,55	10,49
15 NPT65.69	1	TOTAL POPULATION, AGES 65 - 69			8,571	8,66	8,71	8,78	8,83	8,89	8,93	8,95	8,95	8,91	8,89
16 NPT70.74	1	TOTAL POPULATION, AGES 70 AND OVER			15,441	15,84	16,29	16,66	17,03	17,40	17,77	18,13	18,45	18,75	19,07
17 NPT75.79	1	TOTAL POPULATION, AGES 75 & OVER			6,161	6,56	6,79	6,94	7,07	7,17	7,26	7,30	7,36	7,41	7,47
18 NPT80.84	1	TOTAL POPULATION, AGES 80 & OVER			9,081	9,28	9,49	9,72	9,95	10,23	10,51	10,83	11,09	11,34	11,60
19 NPT85.89	1	TOTAL POPULATION, AGES 85 & OVER			163,551	166,00	168,35	170,92	172,45	174,25	175,94	177,64	179,40	181,21	182,70
20 NPT90.94	1	TOTAL POPULATION, AGES 90 & OVER			146,631	149,17	151,66	154,20	156,64	158,98	161,23	163,28	165,09	166,78	168,36
21 NPT95.99	1	TOTAL POPULATION, AGES 95 & OVER			84,131	85,51	86,85	88,35	89,95	91,59	93,24	94,84	96,53	98,29	100,08
22 NPT00.04	1	NUMBER OF HOUSEHOLDS			75,941	77,50	79,06	80,65	82,24	83,82	85,36	86,86	88,31	89,74	91,14
23 NPT05.09	1	NUMBER OF FAMILIES			58,261	59,27	60,26	61,27	62,31	63,32	64,29	65,20	66,10	66,97	67,82
24 NPT10.14	1	UNRELATED INDIVIDUALS			21,571	22,12	22,68	23,24	23,78	24,32	24,86	25,40	25,90	26,39	26,88
25 NPT15.19	1	ARMED FORCES			2,121	2,09	2,07	2,07	2,07	2,07	2,07	2,07	2,07	2,07	2,07
26 NPT20.24	1	CIVILIAN POPULATION, AGE 16 & OVER			161,441	163,92	166,28	168,45	170,38	172,18	173,87	175,57	177,33	179,14	180,63
27 NPT25.29	1	MALE, AGE 16 & OVER			77,641	78,80	79,88	80,81	81,61	82,39	83,12	83,92	84,77	85,55	86,18
28 NPT30.34	1	FEMALE, AGE 16 & OVER			83,791	85,11	86,40	87,63	88,77	89,79	90,75	91,65	92,56	93,49	94,44
29 NPT35.39	1	CIVILIAN LABOR FORCE			100,321	102,74	104,84	106,46	107,99	109,54	111,02	112,54	114,15	115,84	117,38
30 NPT40.44	1	MALE			58,501	59,76	60,65	60,81	61,33	61,86	62,36	62,92	63,53	64,18	64,66
31 NPT45.49	1	FEMALE			41,831	42,98	44,19	45,65	46,66	47,67	48,66	49,63	50,62	51,66	52,71
32 NPT50.54	1	PARTICIPATION RATE (PERCENT)			63,051	63,59	63,98	64,13	64,32	64,56	64,80	65,06	65,34	65,64	65,97
33 NPT55.59	1	MALE			77,791	78,25	78,27	78,47	78,72	78,94	79,00	79,06	79,14	79,23	79,31
34 NPT60.64	1	FEMALE			49,841	50,45	51,16	52,16	52,72	53,30	53,87	54,41	54,95	55,52	56,17
35 NPT65.69	1	TOTAL EMPLOYMENT			90,201	96,38	98,07	100,64	103,02	105,02	106,61	108,25	109,64	110,99	112,31
36 NPT70.74	1	TOTAL UNEMPLOYMENT			6,071	6,36	6,77	7,02	7,26	7,50	7,74	7,98	8,22	8,46	8,70
37 NPT75.79	1	UNEMPLOYMENT RATE (PERCENT)			6,051	6,19	6,46	6,47	6,41	6,43	6,47	6,42	6,45	6,49	6,52

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 1a.20 POPULATION AND LABOR FORCE, GROWTH RATES

LINE VAR LABEL	I T F M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 NPT	I TOTAL POPULATION	0.81	0.8	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.9
2 NPT00.04	E TOTAL POPULATION, AGES 00 - 04	0.81	2.1	2.6	3.7	3.9	3.5	2.9	2.2	1.5	0.9	0.6
3 NPT05.09	E TOTAL POPULATION, AGES 05 - 09	-1.61	-2.3	-2.4	-3.3	-1.0	0.8	2.1	2.5	3.7	3.6	3.5
4 NPT10.14	E TOTAL POPULATION, AGES 10 - 14	-3.21	-2.8	-1.5	0.2	-1.0	-1.6	-2.3	-2.4	-3.2	-1.0	0.7
5 NPT15.19	E TOTAL POPULATION, AGES 15 - 19	-0.51	-0.7	-1.5	-2.9	-3.0	-3.2	-2.0	-1.4	0.2	-1.0	-1.6
6 NPT15.19	E TOTAL POPULATION, AGES 15 - 19	-1.61	-1.4	-4.2	-5.5	-2.7	-2.3	1.3	2.4	2.2	-0.1	-5.4
7 NPT15.19	E TOTAL POPULATION, AGES 15 - 19	-0.21	-1.7	-1.5	-2.8	-4.8	-4.1	-2.5	-0.5	1.9	2.3	-3.1
8 NPT16.17	I TOTAL POPULATION, AGES 16 - 17	-0.31	0.6	-0.2	-1.7	-1.5	-2.0	-4.8	-4.1	-2.5	-0.5	1.9
9 NPT18.19	I TOTAL POPULATION, AGES 18 - 19	1.91	1.3	0.9	0.9	-0.1	-0.5	-0.7	-1.5	-2.9	-1.0	-3.2
10 NPT20.24	I TOTAL POPULATION, AGES 20 - 24	1.71	2.2	2.6	2.1	2.3	1.8	1.3	0.9	0.9	-0.2	-0.5
11 NPT25.29	I TOTAL POPULATION, AGES 25 - 29	3.11	4.2	4.1	5.2	-0.3	1.7	2.2	2.5	2.1	2.3	1.8
12 NPT30.34	I TOTAL POPULATION, AGES 30 - 34	5.81	4.0	3.3	1.8	7.9	3.2	4.2	4.2	5.1	-0.1	1.7
13 NPT35.39	I TOTAL POPULATION, AGES 35 - 39	1.11	1.6	1.6	2.5	3.6	5.8	4.0	3.3	1.8	7.9	3.2
14 NPT40.44	I TOTAL POPULATION, AGES 40 - 44	-1.31	-1.4	-1.6	-0.3	0.4	1.1	1.6	1.6	2.5	3.6	5.8
15 NPT45.49	I TOTAL POPULATION, AGES 45 - 49	-0.51	-0.8	-0.5	-1.1	-1.2	-1.3	-1.3	-1.5	-0.2	0.4	1.1
16 NPT50.54	I TOTAL POPULATION, AGES 50 - 54	1.91	1.1	0.2	0.1	-0.8	-0.5	-0.8	-0.5	-1.1	-1.3	-0.5
17 NPT55.59	I TOTAL POPULATION, AGES 55 - 59	0.71	1.5	2.4	2.1	2.7	1.9	1.1	0.2	0.1	-0.8	-0.5
18 NPT60.64	I TOTAL POPULATION, AGES 60 - 64	1.41	1.1	0.5	0.8	0.6	0.7	1.5	2.5	2.2	2.8	1.9
19 NPT65.69	I TOTAL POPULATION, AGES 65 - 69	2.61	2.6	3.5	2.3	2.2	2.2	2.1	2.0	1.8	1.6	1.7
20 NPT70.74	I TOTAL POPULATION, AGES 70 - 74	3.61	3.2	3.5	2.2	1.9	1.4	1.2	0.6	0.8	0.6	0.7
21 NPT75.79	I TOTAL POPULATION, AGES 75 & OVER	2.01	2.1	2.4	2.4	2.4	2.8	2.7	3.0	2.4	2.3	2.3
22 NPT75.79	I TOTAL POPULATION, AGES 75 & OVER	1.61	1.5	1.4	1.3	1.1	1.0	1.0	1.0	1.0	1.0	0.8
23 NPT16+	I TOTAL POPULATION, AGE 16 & OVER	1.61	1.7	1.7	1.7	1.6	1.5	1.4	1.3	1.1	1.0	0.9
24 NPT20+	I TOTAL POPULATION, AGE 20 & OVER	1.71	1.6	1.6	1.7	1.8	1.8	1.8	1.7	1.6	1.6	1.6
25 NPT30.64	I TOTAL POPULATION, AGES 30 - 64	2.11	2.1	2.0	2.0	2.0	1.9	1.8	1.8	1.7	1.6	1.6
26 NCH	E NUMBER OF HOUSEHOLDS	1.71	1.7	1.7	1.7	1.7	1.6	1.5	1.4	1.4	1.3	1.3
27 NCF	E NUMBER OF FAMILIES	2.61	2.6	2.5	2.5	2.3	2.3	2.2	2.2	2.0	1.9	1.8
28 NCU	E UNRELATED INDIVIDUALS	-0.81	-1.4	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 NLM	E ARMED FORCES	1.61	1.5	1.4	1.3	1.1	1.1	1.0	1.0	1.0	1.0	0.8
30 NPC16+	I CIVILIAN POPULATION, AGE 16 & OVER	3.21	1.5	1.4	1.2	1.0	1.0	0.9	0.9	1.0	1.0	0.8
31 NPCM16+	I MALE, AGE 16 & OVER	0.11	1.6	1.5	1.4	1.3	1.2	1.1	1.0	1.0	1.0	1.0
32 NPCF16+	I FEMALE, AGE 16 & OVER	3.01	2.4	2.0	1.5	1.4	1.4	1.3	1.4	1.4	1.5	1.3
33 NLC	I CIVILIAN LABOR FORCE	1.81	2.2	1.5	0.3	0.9	0.9	0.8	0.9	1.0	1.0	0.8
34 NLCM16+	B MALE	4.71	2.7	2.8	3.3	2.2	2.2	2.1	2.0	2.0	2.1	2.0
35 NLCF16+	B FEMALE	4.11	2.3	1.8	2.6	2.4	1.9	1.5	1.5	1.3	1.2	1.2
36 NLCM16+	B MALE	-11.51	4.8	6.5	-14.1	-14.5	-9.2	-2.4	-2.6	5.0	7.5	4.4
37 NLCF16+	B FEMALE	4.11	2.3	1.8	2.6	2.4	1.9	1.5	1.5	1.3	1.2	1.2
38 NLC	I CIVILIAN LABOR FORCE	4.11	2.3	1.8	2.6	2.4	1.9	1.5	1.5	1.3	1.2	1.2
39 NLCM16+	B MALE	-11.51	4.8	6.5	-14.1	-14.5	-9.2	-2.4	-2.6	5.0	7.5	4.4
40 NLCF16+	B FEMALE	4.11	2.3	1.8	2.6	2.4	1.9	1.5	1.5	1.3	1.2	1.2
41 NLC	I CIVILIAN LABOR FORCE	4.11	2.3	1.8	2.6	2.4	1.9	1.5	1.5	1.3	1.2	1.2
42 NLCM16+	B MALE	-11.51	4.8	6.5	-14.1	-14.5	-9.2	-2.4	-2.6	5.0	7.5	4.4
43 NLCF16+	B FEMALE	4.11	2.3	1.8	2.6	2.4	1.9	1.5	1.5	1.3	1.2	1.2

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 PLUM E PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 14. 50 LABOR FORCE PARTICIPATION RATES (FRACTIONS)

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 MALE, TOTAL	0.777910	0.7825	0.7827	0.7747	0.7726	0.7712	0.7700	0.7695	0.7694	0.7693	0.7689
2 AGES 16 TO 19	0.620110	0.6194	0.6199	0.6241	0.6307	0.6339	0.6401	0.6429	0.6450	0.6456	0.6394
3 AGES 20 TO 24	0.856910	0.8551	0.8508	0.8416	0.8377	0.8348	0.8332	0.8315	0.8299	0.8289	0.8272
4 AGES 25 TO 34	0.949510	0.9535	0.9545	0.9494	0.9484	0.9482	0.9493	0.9503	0.9517	0.9538	0.9557
5 AGES 35 TO 44	0.955510	0.9609	0.9619	0.9495	0.9475	0.9467	0.9471	0.9474	0.9481	0.9495	0.9506
6 AGES 45 TO 54	0.714910	0.7219	0.7223	0.7104	0.7076	0.7060	0.7052	0.7043	0.7039	0.7042	0.7046
7 AGES 55 TO 64	0.735110	0.7449	0.7444	0.7235	0.7069	0.6916	0.6760	0.6717	0.6679	0.6649	0.6624
8 AGES 65 AND OVER	0.204410	0.2022	0.1999	0.1950	0.1904	0.1860	0.1817	0.1771	0.1726	0.1683	0.1642
9 FEMALE, TOTAL	0.498410	0.5045	0.5116	0.5216	0.5272	0.5330	0.5387	0.5441	0.5495	0.5552	0.5617
10 AGES 16 TO 19	0.536210	0.5308	0.5409	0.5600	0.5858	0.5915	0.5960	0.6189	0.6273	0.6309	0.6303
11 AGES 20 TO 24	0.681210	0.6916	0.6989	0.7110	0.7116	0.7159	0.7218	0.7247	0.7295	0.7367	0.7468
12 AGES 25 TO 34	0.620610	0.6289	0.6435	0.6556	0.6562	0.6602	0.6656	0.6677	0.6708	0.6759	0.6833
13 AGES 35 TO 44	0.615110	0.6242	0.6327	0.6531	0.6690	0.6847	0.6981	0.7077	0.7172	0.7271	0.7388
14 AGES 45 TO 54	0.567110	0.5701	0.5749	0.5809	0.5839	0.5918	0.6042	0.6173	0.6344	0.6501	0.6655
15 AGES 55 TO 64	0.414810	0.4280	0.4328	0.4354	0.4373	0.4410	0.4402	0.4411	0.4426	0.4444	0.4468
16 AGES 65 AND OVER	0.083510	0.0832	0.0842	0.0839	0.0837	0.0841	0.0844	0.0843	0.0843	0.0847	0.0855
17 BOTH SEXES, TOTAL	0.630510	0.6359	0.6398	0.6413	0.6432	0.6456	0.6480	0.6506	0.6534	0.6564	0.6597
18 AGES 16 TO 19	0.577810	0.5768	0.5802	0.5918	0.6081	0.6145	0.6178	0.6308	0.6361	0.6382	0.6348
19 AGES 20 TO 24	0.765810	0.7704	0.7740	0.7740	0.7724	0.7732	0.7752	0.7762	0.7778	0.7810	0.7854
20 AGES 25 TO 34	0.780510	0.7870	0.7951	0.7991	0.7987	0.8007	0.8040	0.8056	0.8079	0.8116	0.8163
21 AGES 35 TO 44	0.778810	0.7862	0.7911	0.7959	0.8034	0.8113	0.8185	0.8237	0.8290	0.8349	0.8415
22 AGES 45 TO 54	0.735010	0.7401	0.7430	0.7404	0.7406	0.7439	0.7499	0.7562	0.7648	0.7730	0.7812
23 AGES 55 TO 64	0.566010	0.5795	0.5800	0.5716	0.5648	0.5596	0.5520	0.5505	0.5497	0.5493	0.5495
24 AGES 65 AND OVER	0.133010	0.1319	0.1314	0.1292	0.1272	0.1256	0.1239	0.1220	0.1202	0.1186	0.1174

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 14.40 LABOR FORCE

LINE VAR LABEL	I T E M	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
LABOR FORCE (MILLIONS)														
1	MALE, TOTAL	58,497	59,762	60,653	60,814	61,333	61,864	62,360	62,919	63,530	64,175	64,662		
2	AGES 16 TO 19	5,054	5,024	4,988	4,903	4,794	4,676	4,509	4,419	4,417	4,468	4,396		
3	AGES 20 TO 24	8,025	8,130	8,206	8,163	8,111	8,039	7,964	7,816	7,560	7,301	7,035		
4	AGES 25 TO 34	15,281	15,858	16,429	16,948	17,106	17,420	17,749	18,075	18,335	18,605	18,762		
5	AGES 35 TO 44	10,991	11,106	11,690	11,800	12,508	13,064	13,620	14,152	14,692	15,213	15,605		
6	AGES 45 TO 54	10,137	10,115	10,028	9,837	9,767	9,735	9,739	9,731	9,637	10,042	10,409		
7	AGES 55 TO 64	7,098	7,324	7,372	7,241	7,142	7,039	6,898	6,854	6,792	6,699	6,621		
8	AGES 65 AND OVER	1,910	1,925	1,940	1,922	1,905	1,891	1,879	1,872	1,858	1,848	1,833		
9	MALE, AGES 25 TO 54	36,410	37,359	38,147	38,585	39,381	40,219	41,109	41,958	42,903	43,860	44,776		
10	FEMALE, TOTAL	41,827	42,977	44,192	45,646	46,660	47,675	48,656	49,625	50,619	51,664	52,715		
11	AGES 16 TO 19	4,442	4,403	4,414	4,468	4,530	4,617	4,287	4,343	4,385	4,445	4,412		
12	AGES 20 TO 24	6,866	7,067	7,206	7,400	7,396	7,403	7,403	7,323	7,160	7,013	6,884		
13	AGES 25 TO 34	10,546	11,018	11,644	12,290	12,432	12,733	13,057	13,318	13,577	13,824	14,065		
14	AGES 35 TO 44	7,637	7,976	8,290	8,735	9,467	10,107	10,722	11,276	11,836	12,387	12,882		
15	AGES 45 TO 54	6,733	6,587	6,667	6,689	6,692	6,775	6,928	7,082	7,365	7,702	8,163		
16	AGES 55 TO 64	4,478	4,680	4,748	4,864	4,923	4,992	4,984	4,981	4,968	4,934	4,910		
17	AGES 65 AND OVER	1,125	1,146	1,183	1,201	1,219	1,246	1,276	1,302	1,328	1,360	1,399		
18	BOTH SEXES, TOTAL	100,324	102,739	104,844	106,460	107,993	109,538	111,016	112,541	114,149	115,839	117,376		
19	AGES 16 TO 19	9,496	9,427	9,402	9,371	9,324	9,094	8,796	8,762	8,802	8,913	8,808		
20	AGES 20 TO 24	14,891	15,197	15,412	15,563	15,507	15,443	15,367	15,140	14,720	14,314	13,919		
21	AGES 25 TO 34	25,827	26,876	28,073	29,238	29,538	30,153	30,806	31,392	31,952	32,429	32,827		
22	AGES 35 TO 44	16,628	17,362	19,980	20,535	21,975	23,171	24,342	25,428	26,527	27,600	28,487		
23	AGES 45 TO 54	16,870	16,802	16,695	16,526	16,459	16,510	16,668	16,813	17,202	17,743	18,572		
24	AGES 55 TO 64	11,576	12,004	12,159	12,104	12,065	12,031	11,881	11,835	11,761	11,632	11,531		

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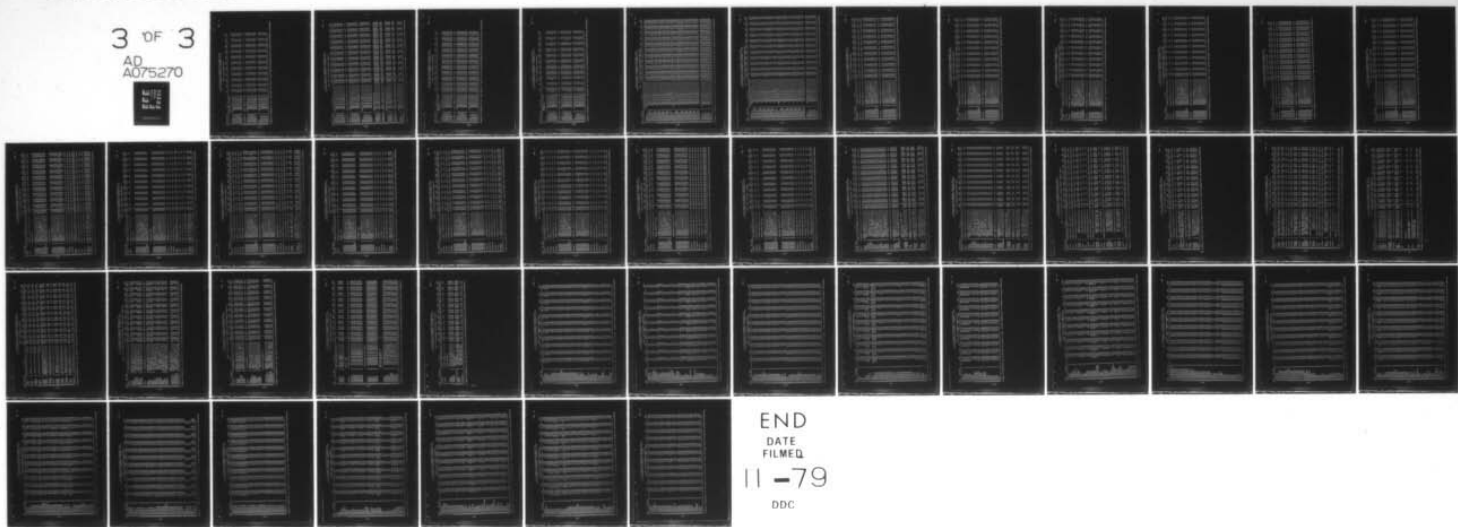
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WHARTON AGGREGATE AND INDUSTRY FORECASTING MODEL  
 HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 14.40 LABOR FORCE

LINE VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
LABOR FORCE (% CHANGE)												
1	MALE, TOTAL	1.41	2.2	1.5	0.3	0.9	0.9	0.8	0.9	1.0	1.0	0.8
2	AGES 16 TO 19	1.31	-0.6	-0.7	-1.7	-2.2	-2.5	-3.6	-2.0	-0.0	1.2	-1.6
3	AGES 20 TO 24	1.01	1.3	0.9	-0.5	-0.6	-0.9	-0.9	-1.9	-3.3	-3.4	-3.6
4	AGES 25 TO 34	2.61	3.6	3.6	3.2	0.9	1.8	1.9	1.0	1.7	1.3	0.8
5	AGES 35 TO 44	3.51	3.6	2.7	0.9	6.0	4.4	4.3	3.9	3.8	3.6	2.6
6	AGES 45 TO 54	-0.51	-0.2	-0.9	-1.4	-0.7	-0.3	0.0	-0.1	1.1	2.1	3.7
7	AGES 55 TO 64	0.01	3.2	0.7	-1.8	-1.4	-1.4	-2.0	-0.6	-0.9	-1.4	-1.2
8	AGES 65 AND OVER	3.51	0.8	0.7	-0.9	-0.9	-0.7	-0.6	-0.4	-0.8	-0.5	-0.8
9	MALE, AGES 25 TO 54	2.01	2.6	2.1	1.1	2.1	2.1	2.2	2.1	2.3	2.2	2.1
10	FEMALE, TOTAL	4.71	2.7	2.8	3.3	2.2	2.2	2.1	2.0	2.0	2.1	2.0
11	AGES 16 TO 19	4.11	-0.9	0.2	1.2	1.4	-2.5	-3.0	1.3	1.0	1.4	-0.7
12	AGES 20 TO 24	4.71	2.9	2.0	2.7	-0.1	0.1	0.0	-1.1	-2.2	-2.1	-1.8
13	AGES 25 TO 34	7.11	4.5	5.7	5.5	1.2	2.4	2.5	2.0	1.9	1.8	1.7
14	AGES 35 TO 44	6.81	4.4	3.9	5.4	8.4	6.8	6.1	5.2	5.0	4.7	4.0
15	AGES 45 TO 54	0.51	-0.7	-0.3	0.3	0.1	1.2	2.3	2.2	4.0	4.6	6.0
16	AGES 55 TO 64	2.51	4.5	2.3	1.6	1.2	1.4	-0.2	-0.1	-0.3	-0.7	-0.5
17	AGES 65 AND OVER	5.61	1.9	3.3	1.6	1.5	2.2	2.4	2.1	2.0	2.4	2.8
18	BOTH SEXES, TOTAL	3.01	2.4	2.0	1.5	1.4	1.4	1.3	1.4	1.4	1.5	1.3
19	AGES 16 TO 19	2.61	-0.7	-0.3	-0.3	-0.5	-2.5	-3.3	-0.4	0.5	1.3	-1.2
20	AGES 20 TO 24	3.21	2.1	1.4	1.0	-0.4	-0.4	-0.5	-1.5	-2.8	-2.8	-2.8
21	AGES 25 TO 34	4.41	4.1	4.5	4.1	1.0	2.1	2.2	1.9	1.8	1.5	1.2
22	AGES 35 TO 44	4.81	3.9	3.2	2.8	7.0	5.4	5.1	4.5	4.3	4.0	3.2
23	AGES 45 TO 54	-0.11	-0.4	-0.6	-1.0	-0.4	0.3	1.0	0.9	2.3	3.1	4.7
24	AGES 55 TO 64	1.51	3.7	1.3	-0.5	-0.3	-0.3	-1.2	-0.4	-0.6	-1.1	-0.9

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QUANTUM ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 14.50 UNEMPLOYMENT RATES (PERCENT)

LINE VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 NRUTM16+	MALE, TOTAL	5.201	5.35	5.69	4.78	4.03	3.61	3.52	3.41	3.57	3.80	3.93
2 NRUTM16,19	AGES 16 TO 19	15.501	15.89	16.25	14.09	12.17	11.20	10.97	10.69	11.20	12.07	12.77
3 NRUTM20,24	AGES 20 TO 24	9.091	9.31	10.05	8.56	7.21	6.51	6.42	6.28	6.64	7.12	7.39
4 NRUTM25,34	AGES 25 TO 34	4.211	4.40	4.89	4.05	3.42	3.06	2.99	2.90	3.04	3.23	3.34
5 NRUTM35,44	AGES 35 TO 44	2.881	3.04	3.28	2.71	2.28	2.04	2.02	1.94	2.10	2.25	2.34
6 NRUTM45,54	AGES 45 TO 54	2.791	2.69	3.01	2.49	2.09	1.87	1.86	1.85	1.98	2.14	2.22
7 NRUTM55,64	AGES 55 TO 64	2.791	2.98	3.16	2.62	2.27	2.08	2.07	2.05	2.20	2.34	2.55
8 NRUTM65+	AGES 65 AND OVER	4.591	4.68	4.85	4.04	3.49	3.18	3.10	3.00	3.13	3.36	3.53
9 NRUTM25,54	MALE, AGES 25 TO 54	3.421	3.57	3.90	3.24	2.73	2.44	2.40	2.34	2.48	2.64	2.73
10 NRUTF16+	FEMALE, TOTAL	7.231	7.35	7.52	6.38	5.37	4.79	4.56	4.34	4.44	4.67	4.80
11 NRUTF16,19	AGES 16 TO 19	17.101	17.02	16.98	14.77	12.72	11.64	11.18	10.71	10.99	11.70	12.29
12 NRUTF20,24	AGES 20 TO 24	10.291	10.41	10.67	9.05	7.55	6.73	6.39	6.04	6.15	6.42	6.55
13 NRUTF25,34	AGES 25 TO 34	6.761	6.92	7.14	6.03	5.07	4.55	4.36	4.16	4.27	4.50	4.64
14 NRUTF35,44	AGES 35 TO 44	5.011	5.17	5.34	4.50	3.81	3.43	3.31	3.18	3.30	3.50	3.63
15 NRUTF45,54	AGES 45 TO 54	4.121	4.33	4.52	3.80	3.21	2.89	2.80	2.69	2.80	2.97	3.09
16 NRUTF55,64	AGES 55 TO 64	3.171	3.50	3.70	3.09	2.61	2.34	2.28	2.20	2.30	2.45	2.54
17 NRUTF65+	AGES 65 AND OVER	3.941	4.15	4.28	3.63	3.04	2.72	2.59	2.46	2.51	2.63	2.70
18 NRUT	BOTH SEXES, TOTAL	6.051	6.19	6.46	5.47	4.61	4.13	3.97	3.82	3.95	4.19	4.32
19 NRUT16,19	AGES 16 TO 19	16.251	16.42	16.50	14.42	12.44	11.42	11.07	10.70	11.09	11.89	12.53
20 NRUT20,24	AGES 20 TO 24	9.681	9.82	10.34	8.79	7.37	6.62	6.40	6.17	6.40	6.78	6.98
21 NRUT25,34	AGES 25 TO 34	5.251	5.43	5.83	4.89	4.11	3.69	3.57	3.43	3.56	3.77	3.90
22 NRUT35,44	AGES 35 TO 44	3.751	3.91	4.14	3.47	2.94	2.65	2.59	2.51	2.64	2.81	2.92
23 NRUT45,54	AGES 45 TO 54	3.321	3.46	3.61	3.02	2.54	2.29	2.25	2.20	2.33	2.50	2.60
24 NRUT55,64	AGES 55 TO 64	2.941	3.18	3.37	2.81	2.41	2.19	2.16	2.11	2.24	2.42	2.54
25 NRUT65+	AGES 65 AND OVER	4.351	4.49	4.63	3.91	3.32	2.99	2.89	2.78	2.87	3.05	3.17
26 NRUT	SCHOOL ENROLLMENT RATES	0.697310	0.6937	0.6970	0.7040	0.7025	0.6993	0.6991	0.6955	0.6930	0.6940	0.7067
27 NRUT16,19	MALE, AGES 16 TO 19	0.895010	0.8877	0.8905	0.8914	0.8910	0.8897	0.8881	0.8873	0.8878	0.8888	0.8896
28 NRUT16,17	MALE, AGES 16 TO 17	0.488410	0.4837	0.4890	0.4894	0.4825	0.4797	0.4775	0.4785	0.4819	0.4902	0.4985
29 NRUT18,19	MALE, AGES 18 TO 19	0.259910	0.2584	0.2604	0.2621	0.2647	0.2666	0.2669	0.2667	0.2670	0.2671	0.2680
30 NRUT20,24	MALE, AGES 20 TO 24	0.661310	0.6736	0.6795	0.6691	0.6474	0.6452	0.6460	0.6360	0.6369	0.6429	0.6538
31 NRUT20,24	FEMALE, AGES 20 TO 24	0.204710	0.2140	0.2213	0.2237	0.2233	0.2241	0.2265	0.2297	0.2334	0.2384	0.2439
32 NRUT16,19	MALE, AGES 16 TO 19	5.6311	5.618	5.589	5.412	5.196	4.987	4.803	4.734	4.768	4.873	4.831
33 NRUT16,17	MALE, AGES 16 TO 17	3.7301	3.681	3.634	3.529	3.352	3.209	3.123	3.109	3.178	3.255	3.154
34 NRUT18,19	MALE, AGES 18 TO 19	1.9001	1.937	1.955	1.884	1.844	1.778	1.680	1.625	1.598	1.618	1.677
35 NRUT20,24	MALE, AGES 20 TO 24	2.4131	2.472	2.508	2.559	2.579	2.572	2.547	2.510	2.411	2.356	2.287
36 NRUT16,19	FEMALE, AGES 16 TO 19	5.5541	5.598	5.538	5.186	4.966	4.862	4.575	4.461	4.469	4.580	4.629
37 NRUT20,24	FEMALE, AGES 20 TO 24	2.1271	2.248	2.308	2.323	2.322	2.331	2.345	2.342	2.323	2.303	2.275
38 NRUT	FERTILITY RATES (RIGHTS/TWENTY)	1437.1	1454.1	1871.1	1917.1	1944.1	1962.1	1978.1	1994.1	2008.1	2021.1	2035.1
39 NRUT16,19	AGES 15 TO 19	55.1	55.1	56.1	56.1	56.1	55.1	54.1	53.1	52.1	51.1	51.1
40 NRUT20,24	AGES 20 TO 24	118.1	121.1	124.1	128.1	131.1	134.1	136.1	137.1	138.1	139.1	140.1

A PRODUCT OF QUANTUM FEA, INC., 3024 WALTON ST., PHILA, PA 19104. WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



WHARTON AGRICAL AND INDUSTRY FORECASTING MODEL  
HIGH-P PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 14.60 NUMBER OF UNEMPLOYED

LINE VAR LABEL	I T E R	1970	1971	1972	1973	1974	1975	1976	1977	1978
1	NUMBER OF UNEMPLOYED									
2	(MILLIONS)									
3	MALE, TOTAL	3.002	3.109	3.452	2.910	2.470	2.235	2.194	2.143	2.266
4	AGES 16 TO 19	0.783	0.794	0.811	0.691	0.584	0.524	0.495	0.472	0.495
5	AGES 20 TO 24	0.729	0.757	0.825	0.699	0.585	0.523	0.495	0.472	0.495
6	AGES 25 TO 30	0.644	0.697	0.804	0.687	0.585	0.533	0.511	0.491	0.502
7	AGES 35 TO 40	0.317	0.346	0.384	0.320	0.285	0.267	0.275	0.280	0.309
8	AGES 45 TO 50	0.283	0.292	0.302	0.245	0.204	0.182	0.182	0.180	0.195
9	AGES 55 TO 60	0.198	0.218	0.233	0.190	0.162	0.146	0.143	0.140	0.149
10	AGES 65 AND OVER	0.088	0.090	0.094	0.078	0.067	0.060	0.058	0.056	0.058
11	MALE, AGES 25 TO 54	1.244	1.335	1.489	1.252	1.073	0.982	0.987	0.983	1.062
12	FEMALE, TOTAL	3.025	3.160	3.322	2.913	2.506	2.284	2.217	2.153	2.246
13	AGES 16 TO 19	0.760	0.789	0.750	0.660	0.576	0.514	0.479	0.465	0.482
14	AGES 20 TO 24	0.706	0.735	0.769	0.670	0.559	0.498	0.473	0.462	0.440
15	AGES 25 TO 30	0.713	0.763	0.832	0.742	0.631	0.579	0.569	0.554	0.580
16	AGES 35 TO 40	0.382	0.412	0.443	0.393	0.360	0.347	0.355	0.359	0.390
17	AGES 45 TO 50	0.278	0.289	0.301	0.254	0.215	0.196	0.194	0.191	0.206
18	AGES 55 TO 60	0.142	0.164	0.177	0.151	0.128	0.117	0.114	0.110	0.114
19	AGES 65 AND OVER	0.044	0.048	0.051	0.044	0.037	0.034	0.033	0.032	0.033
20	BOTH SEXES, TOTAL	6.027	6.359	6.774	5.822	4.976	4.519	4.411	4.296	4.513
21	AGES 16 TO 19	1.543	1.548	1.560	1.351	1.160	1.038	0.974	0.937	0.977
22	AGES 20 TO 24	1.435	1.492	1.594	1.364	1.143	1.022	0.984	0.934	0.942
23	AGES 25 TO 30	1.357	1.460	1.636	1.429	1.215	1.112	1.100	1.078	1.138
24	AGES 35 TO 40	0.561	0.582	0.603	0.499	0.418	0.377	0.375	0.370	0.401
25	AGES 45 TO 50	0.340	0.382	0.410	0.340	0.290	0.263	0.256	0.250	0.264
26	AGES 55 TO 60	0.132	0.138	0.145	0.122	0.104	0.094	0.091	0.088	0.092
27	AGES 65 AND OVER	0.044	0.048	0.051	0.044	0.037	0.034	0.033	0.032	0.033
28	MALE, AGES 25 TO 54	1.244	1.335	1.489	1.252	1.073	0.982	0.987	0.983	1.062
29	FEMALE, AGES 25 TO 54	1.244	1.335	1.489	1.252	1.073	0.982	0.987	0.983	1.062
30	BOTH SEXES, AGES 25 TO 54	2.488	2.670	2.978	2.504	2.146	1.964	1.974	1.966	2.124
31	MALE, AGES 16 TO 19	0.783	0.794	0.811	0.691	0.584	0.524	0.495	0.472	0.495
32	FEMALE, AGES 16 TO 19	0.760	0.789	0.750	0.660	0.576	0.514	0.479	0.465	0.482
33	BOTH SEXES, AGES 16 TO 19	1.543	1.548	1.560	1.351	1.160	1.038	0.974	0.937	0.977
34	MALE, AGES 20 TO 24	0.729	0.757	0.825	0.699	0.585	0.523	0.495	0.472	0.495
35	FEMALE, AGES 20 TO 24	0.706	0.735	0.769	0.670	0.559	0.498	0.473	0.462	0.440
36	BOTH SEXES, AGES 20 TO 24	1.435	1.492	1.594	1.364	1.143	1.022	0.984	0.934	0.942
37	MALE, AGES 25 TO 30	0.644	0.697	0.804	0.687	0.585	0.533	0.511	0.491	0.502
38	FEMALE, AGES 25 TO 30	0.713	0.763	0.832	0.742	0.631	0.579	0.569	0.554	0.580
39	BOTH SEXES, AGES 25 TO 30	1.357	1.460	1.636	1.429	1.215	1.112	1.100	1.078	1.138
40	MALE, AGES 35 TO 40	0.317	0.346	0.384	0.320	0.285	0.267	0.275	0.280	0.309
41	FEMALE, AGES 35 TO 40	0.382	0.412	0.443	0.393	0.360	0.347	0.355	0.359	0.390
42	BOTH SEXES, AGES 35 TO 40	0.699	0.758	0.827	0.713	0.645	0.614	0.630	0.639	0.699
43	MALE, AGES 45 TO 50	0.283	0.292	0.302	0.245	0.204	0.182	0.182	0.180	0.195
44	FEMALE, AGES 45 TO 50	0.278	0.289	0.301	0.254	0.215	0.196	0.194	0.191	0.206
45	BOTH SEXES, AGES 45 TO 50	0.561	0.582	0.603	0.499	0.418	0.377	0.375	0.370	0.401
46	MALE, AGES 55 TO 60	0.198	0.218	0.233	0.190	0.162	0.146	0.143	0.140	0.149
47	FEMALE, AGES 55 TO 60	0.142	0.164	0.177	0.151	0.128	0.117	0.114	0.110	0.114
48	BOTH SEXES, AGES 55 TO 60	0.340	0.382	0.410	0.340	0.290	0.263	0.256	0.250	0.264
49	MALE, AGES 65 AND OVER	0.088	0.090	0.094	0.078	0.067	0.060	0.058	0.056	0.058
50	FEMALE, AGES 65 AND OVER	0.044	0.048	0.051	0.044	0.037	0.034	0.033	0.032	0.033
51	BOTH SEXES, AGES 65 AND OVER	0.132	0.138	0.145	0.122	0.104	0.094	0.091	0.088	0.092

A PRODUCT OF WHARTON E&A, INC., 3624 MARKET ST., PHILA., PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 14.60 NUMBER OF UNEMPLOYED

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1												
2												
3												
4	NUT16+		5.2	7.9	-15.7	-15.1	-9.5	-1.8	-2.3	5.7	7.7	4.1
5	NUT16-19		1.9	1.6	-14.8	-15.5	-10.2	-5.6	-4.5	4.7	9.0	4.1
6	NUT20-24		3.8	9.0	-15.3	-16.3	-10.5	-2.4	-3.9	2.2	3.5	0.1
7	NUT25-34		8.3	15.3	-14.5	-14.9	-8.8	-0.5	-1.3	6.6	7.7	4.3
8	NUT35-44		9.3	10.9	-16.6	-10.9	-6.5	3.0	1.9	10.3	11.0	6.4
9	NUT45-54		3.3	3.3	-19.1	-16.7	-10.7	-0.1	-1.1	8.7	10.1	7.8
10	NUT55-64		10.0	6.7	-18.4	-14.8	-9.8	-2.2	-1.7	6.2	7.4	5.3
11	NUT65+		2.9	4.3	-16.7	-15.1	-9.8	-3.1	-3.5	3.7	6.5	4.3
12												
13	NUT25-54		7.4	11.5	-16.0	-14.3	-8.5	0.5	-0.4	8.0	9.1	5.6
14												
15	NUT16+		4.5	5.1	-12.3	-14.0	-8.9	-2.9	-2.9	4.4	7.4	4.8
16	NUT16-19		-1.3	0.0	-11.9	-12.7	-10.8	-6.8	-3.0	3.6	7.9	4.3
17	NUT20-24		4.1	4.6	-12.9	-16.6	-10.2	-1.7	-6.5	-0.5	2.4	0.2
18	NUT25-34		6.9	9.1	-10.8	-15.0	-8.2	-0.9	-2.7	4.8	7.3	4.8
19	NUT35-44		7.8	7.5	-11.3	-8.3	-3.9	2.5	1.1	8.8	11.1	7.9
20	NUT45-54		4.2	4.1	-15.7	-15.5	-8.9	-0.9	-1.5	8.1	11.1	10.0
21	NUT55-64		15.3	8.1	-14.9	-14.7	-8.9	-2.8	-3.3	4.2	5.6	3.1
22	NUT65+		7.4	6.5	-14.0	-15.0	-8.7	-2.5	-3.2	4.1	7.4	5.4
23												
24	NUT		4.8	6.5	-14.1	-14.5	-9.2	-2.4	-2.6	5.0	7.5	4.4
25	NUT16-19		0.3	0.8	-13.4	-14.1	-10.5	-6.2	-3.8	4.2	8.5	4.2
26	NUT20-24		4.0	6.8	-14.1	-16.5	-10.6	-3.7	-5.1	0.9	3.0	0.2
27	NUT25-34		7.6	12.0	-12.6	-15.0	-8.5	-1.1	-2.0	5.6	7.5	4.6
28	NUT35-44		6.5	9.0	-13.7	-9.5	-5.0	2.7	1.4	9.4	11.0	7.3
29	NUT45-54		3.7	3.7	-17.4	-16.1	-9.8	-0.5	-1.3	8.4	10.6	8.9
30	NUT55-64		12.2	7.3	-16.9	-14.7	-9.4	-2.5	-2.4	5.3	6.8	4.4
31	NUT65+		4.4	5.0	-15.7	-15.0	-9.4	-2.9	-3.4	3.8	6.8	4.7

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST., PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 14.70 CIVILIAN NONINSTITUTIONAL POPULATION

LINE	VAR LABEL	I	T	F	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
CIV NONINST POPULATION (MILLIONS)																
1		MALE, TOTAL														
2	NPCHM16+	75.197	76.376	77.491	78.496	79.390	80.217	80.990	81.766	82.576	83.418	84.095				
3	NPCHM16-19	4.150	4.111	4.047	3.959	3.802	3.611	3.520	3.503	3.568	3.621	3.675				
4	NPCHM16-17P2	4.207	4.116	4.077	3.959	3.765	3.611	3.520	3.503	3.568	3.621	3.675				
5	NPCHM16-19P2	3.943	3.975	3.970	3.897	3.837	3.720	3.525	3.370	3.279	3.262	3.328				
6	NPCHM20-24	9.365	9.699	9.600	9.600	9.600	9.600	9.558	9.400	9.109	8.808	8.505				
7	NPCHM25-34	16.095	16.631	17.212	17.842	18.037	18.371	18.697	19.020	19.307	19.507	19.632				
8	NPCHM25-29P2	6.533	6.717	6.979	7.171	7.391	7.564	7.696	7.740	7.873	7.955	8.003				
9	NPCHM30-34P2	7.562	7.894	8.233	8.671	8.646	8.802	9.001	9.241	9.433	9.652	9.829				
10	NPCHM35-44	11.503	11.850	12.154	12.420	13.200	13.799	14.381	14.934	15.495	16.022	16.416				
11	NPCHM35-39P2	6.120	6.308	6.607	6.737	7.290	7.543	7.867	8.207	8.635	8.904	9.154				
12	NPCHM40-44P2	5.375	5.462	5.547	5.691	5.902	6.256	6.514	6.731	6.960	7.147	7.362				
13	NPCHM45-54	11.081	11.071	10.873	10.805	10.761	10.745	10.759	10.761	10.881	11.105	11.507				
14	NPCHM45-49P2	5.456	5.304	5.301	5.280	5.296	5.350	5.434	5.517	5.659	5.866	6.213				
15	NPCHM50-54P2	5.624	5.508	5.572	5.526	5.465	5.395	5.325	5.244	5.224	5.240	5.294				
16	NPCHM55-64	9.656	9.780	9.903	10.008	10.103	10.178	10.204	10.204	10.149	10.075	9.995				
17	NPCHM55-59P2	5.305	5.369	5.385	5.392	5.333	5.338	5.303	5.289	5.246	5.187	5.119				
18	NPCHM60-64P2	4.351	4.411	4.518	4.616	4.750	4.841	4.901	4.915	4.924	4.888	4.875				
19	NPCHM65+	9.347	9.525	9.703	9.857	10.005	10.143	10.345	10.570	10.765	10.981	11.166				
20	NPCHM65-69P2	3.701	3.750	3.773	3.805	3.828	3.850	3.915	4.015	4.105	4.225	4.304				
21	NPCHM70P2	5.645	5.774	5.930	6.053	6.177	6.305	6.430	6.554	6.660	6.756	6.862				
22	NPCHM16+	83.923	85.181	86.384	87.504	88.507	89.445	90.324	91.210	92.126	93.062	93.841				
23	NPCHM16-19	4.284	4.233	4.159	4.079	3.922	3.746	3.658	3.649	3.707	3.745	3.799				
24	NPCHM16-17P2	4.107	4.035	3.972	3.864	3.681	3.528	3.430	3.419	3.484	3.559	3.647				
25	NPCHM16-19P2	4.177	4.198	4.188	4.115	4.051	3.941	3.753	3.594	3.506	3.486	3.552				
26	NPCHM20-24	10.040	10.218	10.310	10.408	10.394	10.341	10.257	10.105	9.816	9.520	9.217				
27	NPCHM25-34	16.994	17.519	18.096	18.745	18.947	19.286	19.618	19.945	20.240	20.452	20.584				
28	NPCHM25-29P2	9.051	9.209	9.444	9.643	9.870	10.055	10.190	10.281	10.375	10.359	10.307				
29	NPCHM30-34P2	7.979	8.310	8.652	9.102	9.076	9.232	9.428	9.664	9.865	10.094	10.277				
30	NPCHM35-44	12.416	12.779	13.103	13.374	14.151	14.761	15.359	15.934	16.503	17.037	17.436				
31	NPCHM35-39P2	6.644	6.909	7.134	7.260	7.822	8.069	8.402	8.753	9.198	9.168	9.321				
32	NPCHM40-44P2	5.772	5.870	5.968	6.115	6.329	6.691	6.957	7.181	7.305	7.469	7.611				
33	NPCHM45-54	11.873	11.730	11.598	11.514	11.462	11.448	11.466	11.472	11.609	11.848	12.266				
34	NPCHM45-49P2	5.747	5.705	5.614	5.606	5.635	5.697	5.795	5.890	6.035	6.245	6.601				
35	NPCHM50-54P2	6.086	6.025	5.984	5.908	5.827	5.751	5.671	5.582	5.575	5.602	5.668				
36	NPCHM55-64	10.795	10.933	11.063	11.170	11.258	11.321	11.320	11.293	11.225	11.101	10.990				
37	NPCHM55-59P2	5.827	5.887	5.898	5.901	5.852	5.813	5.755	5.717	5.644	5.566	5.492				
38	NPCHM60-64P2	4.968	5.047	5.164	5.269	5.406	5.504	5.566	5.576	5.581	5.535	5.499				
39	NPCHM65+	13.480	13.768	14.054	14.314	14.563	14.819	15.111	15.444	15.742	16.060	16.349				
40	NPCHM65-69P2	4.686	4.732	4.753	4.787	4.816	4.848	4.926	5.044	5.151	5.286	5.383				
41	NPCHM70P2	8.794	9.036	9.301	9.527	9.747	9.971	10.185	10.400	10.592	10.774	10.966				
42		BOTH SEXES, TOTAL														
43	NPCHM16+	159.120	161.556	163.875	166.001	167.897	169.662	171.313	172.976	174.702	176.480	177.936				
44	NPCHM16-19	16.434	16.343	16.206	15.835	15.334	14.799	14.237	13.890	13.838	13.964	13.874				
45	NPCHM16-17P2	16.434	16.343	16.206	15.835	15.334	14.799	14.237	13.890	13.838	13.964	13.874				
46	NPCHM16-19P2	16.434	16.343	16.206	15.835	15.334	14.799	14.237	13.890	13.838	13.964	13.874				
47	NPCHM20-24	33.089	34.150	35.108	36.048	36.904	37.657	38.315	38.965	39.547	39.959	40.216				
48	NPCHM25-34	23.920	24.629	25.256	25.802	27.352	28.560	29.740	30.872	31.998	33.058	33.852				
49	NPCHM35-44	22.954	22.702	22.471	22.319	22.223	22.193	22.225	22.233	22.492	22.953	23.773				
50	NPCHM35-54	20.451	20.711	20.966	21.178	21.361	21.500	21.524	21.407	21.394	21.176	20.985				
51	NPCHM35-59P2	22.826	23.293	23.757	24.172	24.568	24.982	25.456	26.014	26.508	27.041	27.515				

A PRODUCT OF QUANTUM FET, INC., 3624 GUYTON ST., PHILA, PA 19104 - WITH PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 14.70 CIVILIAN NONINSTITUTIONAL POPULATION

LINE	VAR LABEL	I T F M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
CIV NONINST POPULATION (% CHANGE)													
1	NPCNM16+		1.71	1.6	1.5	1.3	1.1	1.0	1.0	1.0	1.0	1.0	0.8
2	NPCNM16-19		-0.21	-0.5	-0.8	-2.4	-2.9	-3.6	-3.9	-2.4	-0.4	1.1	-0.7
3	NPCNM16-17P2		-0.21	-1.7	-1.4	-2.9	-4.9	-4.1	-2.5	-0.5	1.9	2.5	-3.1
4	NPCNM18-19P2		-0.21	0.8	-0.1	-1.8	-1.5	-3.0	-5.2	-4.4	-2.7	-0.5	2.0
5	NPCNM20-24		1.81	1.5	1.0	1.0	-0.2	-0.5	-0.7	-1.7	-3.1	1.0	-3.4
6	NPCNM25-34		3.11	3.3	3.5	3.7	1.1	1.9	1.8	1.7	1.5	1.0	0.6
7	NPCNM25-29P2		1.91	2.4	2.8	2.1	2.4	1.9	1.3	0.9	1.0	-0.2	-0.5
8	NPCNM30-34P2		3.31	4.4	4.3	5.3	-0.3	1.8	2.3	2.7	2.1	2.3	1.8
9	NPCNM35-44		3.71	3.0	2.6	2.3	6.2	4.5	4.2	3.9	3.7	3.4	2.5
10	NPCNM35-39P2		6.21	4.2	3.4	2.0	8.3	3.3	4.3	4.3	5.2	-0.4	1.7
11	NPCNM40-44P2		1.01	1.6	1.6	2.6	3.7	6.0	4.1	3.3	1.9	0.1	3.3
12	NPCNM45-54		-0.91	-1.0	-0.9	-0.6	-0.4	-0.1	0.1	0.0	1.1	2.0	3.6
13	NPCNM45-49P2		-1.31	-1.3	-1.5	-0.4	0.3	1.0	1.6	1.5	2.6	3.7	5.9
14	NPCNM50-54P2		-0.31	-0.6	-0.3	-0.8	-1.1	-1.3	-1.3	-1.5	-0.4	0.3	1.0
15	NPCNM55-64		1.41	1.3	1.3	1.1	0.9	0.8	0.6	-0.3	-0.3	-0.9	-0.8
16	NPCNM55-59P2		1.91	1.2	0.3	0.1	-0.7	-0.3	-0.6	-0.3	-0.3	-1.1	-1.3
17	NPCNM60-64P2		0.81	1.4	2.4	2.2	2.9	1.9	1.2	0.3	0.2	-0.7	-0.3
18	NPCNM65+		1.61	1.9	1.9	1.6	1.5	1.6	1.8	2.2	1.9	2.0	1.7
19	NPCNM65-69P2		1.41	1.3	0.6	0.6	0.6	0.6	1.5	2.6	2.2	2.9	1.9
20	NPCNM70+P2		2.31	2.3	2.7	2.1	2.0	2.1	2.0	1.9	1.6	1.4	1.6
21	NPCNM70+P2		1.81	1.5	1.4	1.3	1.1	1.1	1.0	1.0	1.0	1.0	0.8
22	NPCNF16+		-0.21	-0.5	-0.9	-2.2	-2.7	-3.1	-3.7	-2.4	-0.4	0.0	-0.6
23	NPCNF16-19		-0.21	-1.7	-1.6	-2.7	-4.7	-4.2	-2.5	-0.5	1.9	2.1	-3.1
24	NPCNF16-17P2		-0.21	0.5	-0.2	-1.7	-1.5	-2.7	-4.8	-1.1	-2.5	-0.6	1.9
25	NPCNF18-19P2		2.21	1.4	0.9	0.9	-0.1	-0.5	-0.6	-1.5	-2.9	-3.0	-3.2
26	NPCNF20-24		2.61	3.1	3.3	3.6	1.1	1.8	1.7	1.7	1.5	1.0	0.6
27	NPCNF25-34		1.71	2.1	2.6	2.1	2.4	1.9	1.3	0.9	0.9	-0.2	-0.5
28	NPCNF25-29P2		3.01	4.1	4.1	5.2	-0.3	1.7	2.1	2.5	2.1	2.3	1.8
29	NPCNF30-34P2		3.41	2.9	2.5	2.1	5.8	4.3	4.1	3.7	3.6	3.2	2.1
30	NPCNF35-44		5.81	4.0	3.3	1.8	7.8	3.2	4.1	4.2	5.1	-0.3	1.7
31	NPCNF35-39P2		1.11	1.7	1.7	2.5	3.5	5.7	4.0	3.2	1.7	7.7	3.1
32	NPCNF40-44P2		-1.11	-1.2	-1.1	-0.7	-0.4	-0.1	0.2	0.1	1.2	2.1	3.5
33	NPCNF45-54		-1.31	-1.0	-1.6	-0.1	0.5	1.1	1.7	1.6	2.4	3.5	5.7
34	NPCNF45-49P2		-0.71	-1.0	-0.7	-1.3	-1.4	-1.3	-1.4	-1.6	-0.1	0.5	1.1
35	NPCNF50-54P2		1.41	1.3	1.2	1.0	0.8	0.6	-0.0	-0.2	-0.6	-1.1	-1.0
36	NPCNF55-64		1.81	1.0	0.2	0.1	-0.8	-0.7	-1.0	-0.7	-1.3	-1.4	-1.3
37	NPCNF55-59P2		0.71	1.6	2.3	2.0	2.6	1.9	1.0	0.2	0.1	-0.8	-0.7
38	NPCNF60-64P2		3.11	2.1	2.1	1.9	1.7	1.8	2.0	2.2	1.9	2.0	1.8
39	NPCNF65+		1.41	1.0	0.4	0.7	0.6	0.7	1.6	2.4	2.1	2.6	1.8
40	NPCNF65-69P2		2.81	2.8	2.9	2.4	2.3	2.3	2.2	2.1	1.8	1.7	1.8
41	NPCNF70+P2		1.71	1.5	1.4	1.3	1.1	1.1	1.0	1.0	1.0	1.0	0.8
42	ROTH SEXES, TOTAL		-0.21	-0.6	-0.8	-2.3	-3.2	-3.5	-3.8	-2.4	-0.4	0.9	-0.7
43	NPCMF16-19		2.01	1.4	0.9	1.0	-0.2	-0.5	-0.8	-1.6	-3.0	-3.2	-3.3
44	NPCMF20-24		2.91	3.2	3.4	3.6	1.1	1.8	1.7	1.7	1.5	1.0	0.6
45	NPCMF25-34		3.51	3.0	2.5	2.2	6.0	4.4	4.1	3.8	3.6	3.3	2.4
46	NPCMF35-44		-1.01	-1.1	-1.0	-0.7	-0.4	-0.1	0.1	0.0	1.2	2.1	3.6
47	NPCMF45-54		1.41	1.3	1.2	1.0	0.9	0.7	0.3	-0.1	-0.5	-1.0	-0.9
48	NPCMF55-64		2.51	2.0	2.0	1.7	1.6	1.7	1.9	2.2	1.9	2.0	1.8
49	NPCMF65+												
50	NPCMF65+												

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 BUREAU PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 15.20 MANHOURS, GROWTH RATES

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IMTLTIFG	B MINING	2.11	1.4	-2.5	-1.3	-0.2	-0.3	-0.8	0.5	1.0	1.0	0.5
2													
3	IMTLTIFM	I MANUFACTURING	3.61	2.1	1.1	1.7	2.0	1.1	0.4	1.1	0.4	0.2	-0.1
4													
5	NMLTIFMD	I DURABLE GOODS	5.31	3.0	1.7	2.6	2.9	1.6	0.5	1.5	0.4	0.1	-0.1
6													
7	NMLTIFMD24	B LUMBER	3.31	0.5	0.4	2.4	3.1	2.7	2.1	1.7	1.7	1.6	1.4
8	NMLTIFMD25	B FURNITURE	5.91	3.6	2.8	1.5	2.5	1.7	1.5	2.8	0.5	1.5	0.9
9	NMLTIFMD32	B STONE, CLAY AND GLASS	6.71	4.5	3.7	1.6	2.1	1.3	0.5	1.7	0.9	0.3	0.0
10	NMLTIFMD33	B PRIMARY METALS	4.21	2.1	1.4	2.9	3.6	1.4	-0.4	1.0	-0.4	-1.3	-1.5
11	NMLTIFMD34	B FABRICATED METAL PRODUCTS	5.21	2.3	2.2	3.2	3.6	1.9	0.5	1.6	0.4	0.1	-0.2
12	NMLTIFMD35	B NONELECTRICAL MACHINERY	4.71	1.8	3.4	4.1	4.4	2.7	1.1	2.4	0.9	0.4	0.0
13	NMLTIFMD36	B ELECTRICAL MACHINERY	6.01	4.4	0.8	1.4	1.8	1.0	0.3	0.9	0.1	-0.1	-0.3
14	NMLTIFMD37	B MOTOR VEHICLES	3.61	1.5	0.6	1.9	1.1	0.3	-0.6	0.3	-1.0	-1.5	-1.7
15	NMLTIFMD37SP2	B NONAUTO TRANS (D + ORD + MISC	6.31	4.6	0.3	2.5	2.4	1.0	0.3	1.4	0.7	0.5	0.3
16	NMLTIFMD38	B INSTRUMENTS	4.91	4.7	1.6	2.0	2.3	1.5	0.9	1.6	1.1	0.9	0.8
17													
18	NMLTIFMD39	I NONDURABLE GOODS	1.41	0.8	0.1	0.2	0.5	0.4	0.2	0.4	0.4	0.2	0.0
19													
20	NMLTIFMD20	B FOOD AND BEVERAGES	1.41	-1.6	-1.9	-2.0	-1.6	-1.4	-1.2	-0.7	-0.2	-0.1	0.1
21	NMLTIFMD21	B TOBACCO	0.11	-1.3	-1.4	-1.1	-0.9	-0.9	-0.9	-0.6	-1.1	-1.2	-1.3
22	NMLTIFMD22	B TEXTILES	-0.91	-0.6	-0.7	0.8	1.3	1.1	0.8	1.1	0.8	0.5	-0.2
23	NMLTIFMD23	B APPAREL	1.31	1.5	-0.0	0.3	0.3	0.0	-0.6	-0.6	-0.9	-1.0	-1.2
24	NMLTIFMD26	B PAPER	1.01	1.6	1.0	1.6	1.7	1.3	0.8	0.8	0.6	0.3	-0.0
25	NMLTIFMD27	B PRINTING AND PUBLISHING	1.91	3.1	1.4	1.4	1.3	1.5	1.5	1.7	1.6	1.5	1.3
26	NMLTIFMD28	B CHEMICALS	1.21	0.6	0.4	-1.1	-0.5	-0.3	0.3	0.4	0.3	0.1	-0.1
27	NMLTIFMD29	B PETROLEUM	-0.51	2.6	1.1	-0.6	-0.7	-1.0	-1.3	-1.4	-1.6	-1.8	-2.0
28	NMLTIFMD30	B RUBBER	1.61	2.0	2.3	2.8	3.4	2.7	1.9	2.3	1.6	1.3	0.9
29	NMLTIFMD31	B LEATHER	2.81	2.2	2.9	0.5	0.0	-0.5	-0.9	-0.7	-0.7	-0.7	-0.8

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TARIF 16.10 REAL OUTPUT PER MANHOUR (1972 \$ / MANHOUR)

LINE	VAR LABEL	T I T L E	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	X1GMH	Mining	10.71	10.7	11.6	12.4	13.1	13.7	14.3	14.9	15.3	15.7	16.1
2	X1MFMH	Manufacturing	8.11	8.2	8.4	8.7	9.1	9.3	9.6	9.9	10.1	10.4	10.7
3	X1MFMH	Manufacturing	7.91	8.0	8.2	8.5	8.8	9.0	9.2	9.5	9.7	10.0	10.2
4	X1MFMH	Durable Goods	7.21	7.5	7.9	8.2	8.5	8.7	8.8	9.0	9.2	9.5	9.7
5	X1MFMH	Lumber	4.81	4.8	4.9	5.1	5.3	5.4	5.6	5.8	6.0	6.1	6.2
6	X1MFMH	Furniture	7.21	7.2	7.2	7.4	7.5	7.7	7.9	8.1	8.2	8.4	8.6
7	X1MFMH	Stone, Clay and Glass	7.81	8.0	8.2	8.4	8.5	8.6	8.7	8.9	9.0	9.2	9.4
8	X1MFMH	Primary Metals	6.51	6.6	6.7	6.9	7.0	7.1	7.2	7.4	7.5	7.6	7.8
9	X1MFMH	Fabricated Metal Products	7.61	7.8	8.0	8.2	8.5	8.6	8.8	9.0	9.2	9.4	9.6
10	X1MFMH	Non-electrical Machinery	7.61	7.8	7.9	8.3	8.6	9.0	9.3	9.7	10.1	10.4	10.8
11	X1MFMH	Electrical Machinery	16.41	16.5	17.1	18.0	19.0	19.8	20.5	21.6	22.5	23.5	24.4
12	X1MFMH	Motor Vehicles	6.51	6.6	6.7	6.9	7.1	7.3	7.5	7.7	7.8	8.0	8.2
13	X1MFMH	Nonauto Transp & Ord & Misc. MFD	7.91	7.9	8.1	8.4	8.7	9.0	9.2	9.5	9.8	10.0	10.2
14	X1MFMH	Instruments	8.31	8.5	8.8	9.1	9.5	9.8	10.1	10.5	10.8	11.1	11.4
15	X1MFMH	Nondurable Goods	9.01	9.4	9.6	10.1	10.6	11.1	11.4	11.8	12.1	12.3	12.6
16	X1MFMH	Food and Beverages	15.21	16.4	17.8	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7
17	X1MFMH	Tobacco	4.91	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.4	6.6	6.8
18	X1MFMH	Textiles	5.21	5.3	5.5	5.7	6.0	6.2	6.4	6.8	7.0	7.3	7.7
19	X1MFMH	Apparel	8.11	8.4	8.6	8.9	9.2	9.5	9.8	10.1	10.5	10.8	11.2
20	X1MFMH	Paper	7.61	7.7	8.0	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.3
21	X1MFMH	Printing and Publishing	11.71	12.0	12.4	13.2	13.9	14.6	15.1	15.8	16.4	17.0	17.7
22	X1MFMH	Chemicals	19.41	19.6	20.2	21.2	22.3	23.3	24.2	25.5	26.7	27.9	29.2
23	X1MFMH	Petroleum	7.31	7.4	7.6	7.9	8.1	8.3	8.4	8.7	8.8	9.0	9.2
24	X1MFMH	Rubber	4.61	4.8	4.8	4.9	5.0	5.2	5.4	5.5	5.7	5.9	6.1
25	X1MFMH	Leather											

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WHARTON AGMIAL AND INDUSTRY FORECASTING MODEL  
 HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 16.20 REAL OUTPUT PER MANHOUR, % CHANGE

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	XMF001	MINING	2.71	2.1	5.9	7.0	6.0	4.5	4.2	4.3	2.8	2.5	2.8
2	XMF002												
3	XMF003	MANUFACTURING	2.51	2.1	2.4	3.8	3.6	2.8	2.6	3.3	2.6	2.6	2.6
4	XMF004												
5	XMF005	DURABLE GOODS	1.21	1.7	2.1	3.5	3.4	2.5	2.4	3.1	2.4	2.4	2.4
6	XMF006												
7	XMF007	LUMBER	4.51	3.5	4.8	4.3	4.1	1.9	1.0	2.3	2.9	2.4	2.5
8	XMF008	FURNITURE	-0.11	0.4	2.2	3.2	3.9	3.2	3.1	3.6	3.5	1.7	1.4
9	XMF009	STONE, CLAY AND GLASS	-2.51	0.2	0.1	1.7	2.6	2.1	2.2	3.0	1.8	2.0	2.3
10	XMF010	PRIMARY METALS	-0.81	2.5	2.3	2.6	2.1	1.1	0.9	1.9	0.8	0.8	1.4
11	XMF011	FABRICATED METAL PRODUCTS	-0.71	2.2	1.6	2.4	2.2	1.6	1.6	2.3	1.5	1.7	1.7
12	XMF012	NONFABRICATED METAL PRODUCTS	2.91	3.1	2.0	3.1	3.0	2.0	2.0	2.4	1.9	2.1	2.1
13	XMF013	ELECTRICAL MACHINERY	2.31	2.1	1.3	4.6	4.5	4.0	3.8	4.2	3.6	3.7	3.7
14	XMF014	MOTOR VEHICLES	5.01	0.2	4.0	4.8	5.7	4.3	3.8	5.1	4.2	4.4	4.0
15	XMF015	NONAUTO TRANSPORTATION	-1.31	1.9	1.8	3.1	2.7	2.2	2.2	2.8	2.1	2.2	2.2
16	XMF016	INSTRUMENTS	-0.01	0.8	2.0	3.7	3.7	3.0	2.7	3.3	2.6	2.5	2.3
17	XMF017												
18	XMF018	NONDURABLE GOODS	4.31	2.7	2.9	4.4	4.1	3.4	2.9	3.6	3.0	2.9	2.8
19	XMF019												
20	XMF020	FOOD AND BEVERAGES	3.31	4.2	2.3	5.4	4.8	4.1	3.4	3.2	2.4	2.1	1.9
21	XMF021	TOBACCO	3.21	3.6	3.8	5.7	5.4	4.9	4.3	5.5	5.5	5.4	4.9
22	XMF022	APPAREL	7.91	1.9	3.4	4.5	4.2	3.8	4.0	4.7	4.3	4.3	4.4
23	XMF023	TEXTILES	5.51	4.1	3.3	4.5	3.8	3.0	2.8	3.6	2.7	2.5	3.0
24	XMF024	PAPER	6.31	2.8	2.5	3.7	3.8	3.1	2.8	4.0	3.4	3.1	3.2
25	XMF025	PRINTING AND PUBLISHING	5.11	1.9	4.0	2.7	2.8	1.9	1.5	2.0	1.5	1.4	1.4
26	XMF026	CHEMICALS	5.31	2.7	3.1	6.2	5.7	4.8	3.5	4.6	3.9	3.8	3.7
27	XMF027	PETROLEUM	4.01	1.2	2.9	5.0	5.1	4.3	4.0	5.3	4.7	4.8	4.7
28	XMF028	RUBBER	1.51	1.3	2.6	3.6	2.9	1.9	1.7	2.8	1.9	2.1	2.0
29	XMF029	LEATHER	3.71	3.3	0.3	2.6	2.9	3.0	3.1	3.5	3.1	3.0	3.1

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FACTORY ACTUAL AND INDUSTRY FORECASTING MODEL  
 1974-80 PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 17.10 AVERAGE OFFERLY HOURS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	INDURAC	43.81	42.72	42.66	43.04	43.19	43.11	42.77	42.57	42.32	42.02	41.65
2	INDURAC	40.30	40.29	40.21	40.26	40.36	40.38	40.37	40.46	40.46	40.45	40.43
3	INDURAC	40.94	40.91	40.84	40.90	40.98	40.92	40.82	40.88	40.81	40.76	40.71
4	INDURAC	39.87	39.78	39.94	39.99	40.06	40.07	40.01	39.91	39.81	39.69	39.55
5	INDURAC	39.24	39.79	40.11	40.08	40.18	40.15	40.13	40.24	40.14	40.14	40.03
6	INDURAC	41.64	41.74	42.27	42.40	42.49	42.44	42.30	42.31	42.20	42.06	41.91
7	INDURAC	41.17	41.24	41.39	41.62	41.86	41.81	41.65	41.82	41.79	41.74	41.62
8	INDURAC	40.80	40.58	40.43	40.51	40.62	40.56	40.44	40.52	40.48	40.45	40.44
9	INDURAC	41.60	41.20	41.25	41.43	41.61	41.52	41.33	41.39	41.26	41.16	41.08
10	INDURAC	40.35	40.47	40.20	40.14	40.13	40.07	39.99	39.99	39.93	39.88	39.85
11	INDURAC	42.19	41.78	41.36	41.15	41.03	40.93	40.86	40.94	40.91	40.90	40.91
12	INDURAC	40.83	41.11	40.60	40.83	40.86	40.83	40.81	40.87	40.88	40.90	40.91
13	INDURAC	40.35	40.73	40.57	40.58	40.63	40.60	40.56	40.63	40.62	40.62	40.63
14	INDURAC	39.36	39.37	39.26	39.25	39.37	39.50	39.63	39.76	39.86	39.94	39.97
15	INDURAC	39.91	39.85	39.55	39.23	39.29	39.51	39.75	39.96	40.17	40.33	40.49
16	INDURAC	38.09	37.72	37.23	36.95	36.81	36.77	36.81	36.94	36.91	36.86	36.81
17	INDURAC	39.51	39.05	38.86	39.01	39.25	39.43	39.55	39.73	39.86	39.96	39.83
18	INDURAC	35.43	35.70	35.57	35.62	35.74	35.86	35.90	35.94	35.97	36.00	36.05
19	INDURAC	42.34	42.26	42.22	42.44	42.67	42.87	43.01	43.18	43.34	43.48	43.60
20	INDURAC	38.01	38.41	38.45	38.54	38.66	38.78	38.86	38.94	38.99	39.00	38.98
21	INDURAC	41.74	41.73	41.69	41.66	41.67	41.67	41.67	41.67	41.67	41.67	41.67
22	INDURAC	42.31	42.19	41.91	41.77	41.67	41.59	41.52	41.47	41.44	41.43	41.43
23	INDURAC	40.86	40.96	40.86	40.86	40.86	41.10	41.13	41.09	41.12	41.10	41.03
24	INDURAC	36.72	36.45	36.79	36.93	37.03	37.10	37.16	37.26	37.36	37.45	37.55

A PRODUCT OF WHARTON CPA, INC., 3624 MARKET ST., PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
WICOR PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 17.20 AVERAGE WEEKLY HOURS, % CHANGE

LINE	VAR LABEL	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	HHHPMF01	B MTHNG	-1.61	-1.5	0.1	0.4	0.4	-0.2	-0.8	-0.5	-0.6	-0.7	-0.7
2	HHHPMF02	I MANUFACTURING	-0.01	-0.0	-0.2	0.1	0.1	0.0	-0.0	0.2	0.0	-0.0	-0.1
3	HHHPMF03	J DURABLE GOODS	0.11	-0.1	-0.2	0.1	0.2	-0.1	-0.3	0.1	-0.2	-0.1	-0.1
4	HHHPMF04	B LUMBER	-0.61	-0.2	0.4	0.1	0.2	0.0	-0.2	0.1	-0.3	-0.3	-0.3
5	HHHPMF05	B FURNITURE	1.11	1.4	0.8	-0.1	0.3	-0.1	-0.0	0.1	-0.3	0.0	-0.3
6	HHHPMF06	B STONE, CLAY AND GLASS	0.61	0.2	1.3	0.3	0.2	-0.1	-0.3	0.0	-0.2	-0.3	-0.3
7	HHHPMF07	B PRIMARY METALS	0.21	0.2	0.4	0.6	0.6	-0.1	-0.4	0.4	-0.1	-0.1	-0.1
8	HHHPMF08	B FABRICATED METAL PRODUCTS	-0.21	-0.6	-0.4	0.2	0.3	-0.2	-0.3	0.2	-0.1	-0.1	-0.0
9	HHHPMF09	B NON-ELECTRICAL MACHINERY	-0.01	-1.0	0.1	0.4	0.4	-0.2	-0.5	0.1	-0.3	-0.2	-0.2
10	HHHPMF10	B ELECTRICAL MACHINERY	0.41	0.3	-0.7	-0.1	-0.0	-0.2	-0.2	-0.0	-0.2	-0.1	-0.1
11	HHHPMF11	B MOTOR VEHICLES	-4.31	-1.0	-1.0	-0.5	-0.3	-0.2	-0.2	0.2	-0.1	-0.0	0.0
12	HHHPMF12	B NON-AUTO TRAN EQUIP + ORD & MISC	1.81	0.7	-0.7	0.1	0.1	-0.1	-0.1	0.2	0.0	0.0	0.0
13	HHHPMF13	B INSTRUMENTS	-0.11	1.0	-0.4	0.0	0.1	-0.1	-0.1	0.2	-0.0	-0.0	0.0
14	HHHPMF14	I NONDURABLE GOODS	-0.11	0.0	-0.3	-0.0	0.3	0.3	0.3	0.3	0.3	0.2	0.1
15	HHHPMF15	B FOOD AND BEVERAGES	0.01	-0.1	-0.8	-0.8	0.2	0.6	0.6	0.5	0.5	0.4	0.4
16	HHHPMF16	B TOBACCO	-0.51	-1.0	-1.3	-0.8	-0.4	-0.1	0.1	0.3	-0.1	-0.1	-0.1
17	HHHPMF17	B TEXTILES	-2.21	-1.2	-0.5	0.4	0.6	0.5	0.3	0.4	0.3	0.2	-0.3
18	HHHPMF18	B APPAREL	0.11	0.8	-0.4	0.1	0.3	0.3	0.1	0.1	0.1	0.1	0.1
19	HHHPMF19	B PAPER	-1.11	-0.2	-0.1	0.5	0.6	0.5	0.3	0.4	0.4	0.3	0.3
20	HHHPMF20	B PRINTING AND PUBLISHING	0.61	1.0	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.0	-0.1
21	HHHPMF21	B CHEMICALS	0.11	-0.0	-0.1	-0.1	0.0	-0.0	0.6	0.5	0.3	0.1	-0.0
22	HHHPMF22	B PETROLEUM	-1.41	-0.3	-0.7	-0.3	-0.2	-0.2	-0.2	-0.1	-0.1	-0.0	-0.0
23	HHHPMF23	B RUBBER	-0.31	0.2	-0.2	0.2	0.3	0.1	-0.1	0.1	-0.1	-0.1	-0.1
24	HHHPMF24	B LEATHER	-0.81	-0.7	0.9	0.4	0.3	0.2	0.2	0.3	0.3	0.2	0.3

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

CONVENTION ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 18.10 CAPITAL STOCK (1972 \$)

LINE	VAR LABEL	TYPE	1970	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	KIAG	I FARM	45.53	46.62	47.27	49.18	52.21	56.14	60.56	64.82	68.72	72.34	75.76
2	KIANG	I MINING	21.62	22.34	23.28	24.63	26.34	28.17	29.89	31.63	33.42	35.49	37.79
3													
4													
5		DURABLE GOODS											
6	KIAMD24	I LUMBER	10.64	11.01	11.37	11.81	12.37	13.03	13.72	14.45	15.20	16.00	16.84
7	KIAMD25	I FURNITURE	1.83	1.86	1.89	1.95	2.01	2.07	2.13	2.20	2.27	2.33	2.41
8	KIAMD25	I STONE, CLAY AND GLASS	17.58	18.03	18.62	19.29	20.25	21.34	22.39	23.40	24.35	25.31	26.33
9	KIAMD32	I PRIMARY METALS	36.65	37.95	39.28	40.98	42.83	44.72	46.55	48.45	50.29	51.97	53.68
10	KIAMD33	I FABRICATED METAL PRODUCTS	19.30	19.94	20.59	21.37	22.24	23.16	24.10	25.04	25.92	26.77	27.63
11	KIAMD34	I ELECTRICAL MACHINERY	44.19	46.52	48.83	51.44	54.39	57.51	60.62	63.87	67.14	70.47	73.83
12	KIAMD35	I ELECTRICAL MACHINERY	27.41	28.41	29.49	30.65	32.45	34.14	35.80	37.47	39.16	40.90	42.71
13	KIAMD36	I MOTOR VEHICLES	18.84	20.15	21.68	23.31	24.85	26.04	27.07	28.10	29.62	30.90	31.98
14	KIAMD37	I NONAUTO TRANSPORT + ORD + MISC	9.55	9.76	10.03	10.43	10.95	11.53	12.09	12.66	13.21	13.80	14.41
15	KIAMD37SP2	I INSTRUMENTS	9.09	9.46	9.87	10.36	10.93	11.55	12.17	12.84	13.52	14.21	14.90
16	KIAMD38												
17													
18		NONDURABLE GOODS											
19													
20	KIAMD20	I FOOD AND BEVERAGES	27.73	28.26	28.86	29.62	30.36	31.06	31.81	32.75	33.81	35.04	36.48
21	KIAMD21	I TORACCO	1.46	1.50	1.54	1.58	1.63	1.68	1.74	1.80	1.87	1.94	2.02
22	KIAMD22	I TEXTILES	7.34	7.36	7.42	7.55	7.77	8.03	8.30	8.57	8.84	9.09	9.31
23	KIAMD23	I APPAREL	2.61	2.68	2.72	2.78	2.86	2.95	3.04	3.13	3.22	3.31	3.40
24	KIAMD26	I PAPER	24.62	26.17	27.61	29.18	30.98	32.97	35.04	37.16	39.33	41.58	43.92
25	KIAMD27	I PRINTING AND PUBLISHING	7.54	7.58	7.66	7.78	7.96	8.17	8.41	8.69	8.99	9.31	9.68
26	KIAMD28	I CHEMICALS	40.29	41.54	43.03	44.94	47.23	49.91	52.84	55.83	58.75	61.89	65.11
27	KIAMD29	I PETROLEUM	96.76	101.05	105.05	109.49	114.66	120.27	125.94	131.51	136.64	141.52	146.34
28	KIAMD30	I RUBBER	13.61	14.35	14.90	15.54	16.41	17.37	18.39	19.42	20.56	21.74	22.96
29	KIAMD31	I LEATHER	1.65	1.68	1.71	1.75	1.80	1.85	1.91	1.96	2.01	2.06	2.11
30													
31	KIARGT	I TRANSPORTATION	60.13	59.98	59.89	60.22	60.68	61.15	61.73	62.59	63.63	65.03	66.80
32													
33	KIARGU49	I UTILITIES	209.53	219.44	230.28	242.25	255.45	269.60	284.24	299.49	314.74	330.35	346.61
34													
35	KIARGC48	I COMMUNICATIONS	113.02	117.69	122.94	129.36	136.80	144.96	153.39	162.05	170.63	179.50	188.61
36													
37	KIACD	I COMMERCIAL AND OTHER	417.83	436.46	452.25	470.37	491.11	512.87	534.75	558.05	580.29	602.66	625.31
38	KIACD	I COMMERCIAL	196.25	197.47	199.60	203.08	208.03	213.99	220.60	228.06	235.69	243.69	252.10
39													
40	KWGNP	I STOCK OF REAL WEALTH	1276.4	1321.6	1364.5	1405.6	1455.2	1511.2	1567.7	1621.8	1681.2	1737.8	1791.9
41													
42	KCEDA	I STOCK OF AUTOS	156.0	150.7	163.6	170.7	179.8	188.4	195.5	203.3	210.4	217.0	222.2
43													
44	KIBERN	I STOCK OF NONFARM RESID. STRUCTURES	717.3	730.7	740.9	755.2	775.2	796.7	818.2	845.3	873.3	899.1	920.8
45													
46	KIBID	I TOTAL NONFARM INVESTMENTS	278.85	285.65	291.59	302.77	318.76	336.16	353.55	372.52	391.30	409.85	428.19
47	KIBIDAV	I STOCK OF AUTO DEALER INVENTORIES	9.71	9.85	9.89	10.25	10.60	11.32	12.16	12.98	13.58	14.12	14.72
48	KIBIDV	I STOCK OF MANUFACTURERS INVENTORIES	134.25	133.94	140.60	145.33	152.98	161.64	170.54	180.01	189.44	198.77	207.71
49	KIBIDV	I STOCK OF GOV. INVENTORY	134.69	137.86	141.09	147.18	155.17	163.20	170.85	179.52	188.29	196.96	205.76

A PRODUCT OF MARTIN L. L. 3624 MAPLE ST., ELLI, PA 19104 BUTTER PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
 HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 1A.20 CAPITAL STOCK, GROWTH RATES

LINE	VAR LABEL	I T F M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	KIAG	I FARM	1.61	2.4	1.4	4.0	6.2	7.5	7.9	7.0	6.0	5.3	4.7
2	KIAG	I MINING	2.91	3.3	4.2	5.0	7.0	6.9	6.1	5.0	5.6	6.2	6.5
3	KIAG	I DURABLE GOODS											
4													
5													
6	KIAMD24	I LUMBER	3.21	3.4	3.3	3.9	4.7	5.1	5.3	5.4	5.2	5.2	5.3
7	KIAMD25	I FURNITURE	1.21	1.4	1.0	3.0	3.1	2.9	3.1	3.3	2.9	3.0	3.1
8	KIAMD26	I STONE, CLAY AND GLASS	2.81	2.7	3.3	3.6	5.0	5.4	4.9	4.5	4.1	4.0	4.0
9	KIAMD32	I PRIMARY METALS	2.31	3.0	3.5	4.3	4.5	4.4	4.1	4.1	3.8	3.4	2.9
10	KIAMD33	I FABRICATED METAL PRODUCTS	3.21	3.3	3.2	3.8	4.0	4.2	4.0	3.9	3.5	3.3	3.2
11	KIAMD34	I NONMETALLIC MINERAL PRODUCTS	4.41	4.0	5.0	5.3	5.0	5.7	5.4	5.4	5.1	5.0	4.8
12	KIAMD35	I ELECTRICAL MACHINERY	2.91	3.6	3.0	4.6	5.2	5.2	4.9	4.7	4.5	4.5	4.4
13	KIAMD36	I ELECTRONIC MACHINERY	6.11	7.0	7.6	7.5	6.6	4.8	4.0	4.5	4.7	4.3	3.5
14	KIAMD37	I MOTOR VEHICLES	1.71	2.3	2.8	4.0	5.0	5.2	4.9	4.7	4.4	4.4	4.4
15	KIAMD37SP2	I NONAUTO TRANS FO + ORD + MISC	4.11	4.0	4.4	4.9	5.5	5.7	5.4	5.4	5.1	5.1	4.9
16	KIAMD38	I INSTRUMENTS											
17													
18													
19													
20	KIAMD20	I FOOD AND BEVERAGES	2.11	1.9	2.1	2.6	2.5	2.3	2.4	2.9	3.2	3.6	4.1
21	KIAMD21	I TORACCO	2.71	2.5	2.5	2.8	3.1	3.3	3.5	3.7	3.8	3.8	3.9
22	KIAMD22	I TEXTILES	0.11	0.2	0.0	1.8	2.9	3.4	3.3	3.4	3.1	2.0	2.5
23	KIAMD23	I APPAREL	1.11	1.0	1.8	2.8	3.6	4.1	4.4	4.7	4.6	4.6	4.6
24	KIAMD26	I PAPER	4.81	5.4	5.5	5.7	6.2	6.4	6.3	6.0	5.8	5.7	5.6
25	KIAMD27	I PRINTING AND PUBLISHING	0.51	0.5	1.1	1.6	2.2	2.7	2.9	3.3	3.4	3.7	3.9
26	KIAMD28	I CHEMICALS	3.11	3.1	3.6	4.4	5.1	5.7	5.9	5.7	5.2	5.3	5.2
27	KIAMD29	I PETROLEUM	5.01	4.4	4.0	4.2	4.7	4.9	4.7	4.4	3.9	3.6	3.4
28	KIAMD30	I RUBBER	3.41	3.6	3.0	4.3	5.6	5.8	5.7	5.8	5.8	5.0	5.6
29	KIAMD31	I LEATHER	1.31	1.4	2.0	2.6	2.6	2.9	2.9	2.9	2.6	2.4	2.3
30													
31	KIARG1	I TRANSPORTATION	0.01	-0.3	-0.2	0.6	0.8	0.8	1.0	1.4	1.7	2.2	2.7
32													
33	KIARG49	I UTILITIES	4.71	4.7	4.9	5.2	5.4	5.5	5.4	5.4	5.1	5.0	4.9
34													
35	KIARG48	I COMMUNICATIONS	3.61	3.8	4.5	5.2	5.8	6.0	5.8	5.6	5.3	5.2	5.2
36													
37	KIACD	I COMMERCIAL AND OTHER	5.01	4.5	3.6	4.0	4.4	4.4	4.3	4.4	4.0	3.9	3.8
38	KIACM	I COMMERCIAL	0.51	0.6	1.1	1.7	2.4	2.9	3.1	3.4	3.3	3.4	3.5
39													
40	KAGUP	I STOCK OF REAL WEALTH	1.41	3.5	3.2	3.0	3.5	3.8	3.7	3.5	3.7	3.4	3.1
41													
42	KCEDA	I STOCK OF AUTOS	5.41	2.4	2.4	4.3	5.3	4.8	3.8	4.0	3.5	3.1	2.4
43													
44	KIBERN	I STOCK OF NONFARM RESID. STRUCTURES	3.31	1.9	1.4	1.9	2.6	2.8	2.7	3.3	3.3	3.0	2.4
45													
46	KIBJ4	I TOTAL INVENTORY INVENTORIES	4.41	2.4	2.1	3.8	5.3	5.5	5.2	5.4	5.0	4.7	4.5
47	KIBJ4AV	B STOCK OF AUTO DEALER INVENTORIES	-1.01	1.4	0.4	3.7	3.4	6.8	7.4	6.7	4.6	4.0	4.2
48	KIBJ4F	B STOCK OF MANUFACTURERS INVENTORIES	4.21	2.8	1.9	3.4	5.3	5.7	5.5	5.6	5.2	4.9	4.5
49	KIBJ4M	I STOCK OF HOUSEHOLD DURABLES	5.11	2.2	2.3	4.3	5.4	5.2	4.7	5.1	4.9	4.6	4.5

A PRODUCT OF CHARTERED, P.C., 3624 MARKET ST., PHILA., PA 19104. WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



CHARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
 MILLER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 19.00 DEPRECIATION (CURRENT \$)

LINE	VAP LABEL	I	E	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	CCATS	1	ALL INDUSTRIES	217,041	242,24	265,91	294,69	327,05	362,67	400,97	441,83	484,57	528,93	575,11
2	CCATAGS	3	AGRIC, FORESTRY & FISHERIES	10,94	11,90	13,04	14,48	16,36	18,70	21,41	24,24	27,12	30,03	33,02
3	CCATAGS	4	MINING	7,08	7,75	8,43	9,39	10,57	11,89	13,29	14,77	16,37	18,18	20,21
4	CCATAGS	5	MANUFACTURING	42,35	46,50	50,68	56,40	62,91	70,16	78,04	86,43	95,32	104,72	114,69
5	CCATAGS	6	DURABLE GOODS	24,98	27,44	29,96	33,43	37,38	41,73	46,41	51,38	56,64	62,16	67,96
6	CCATAGS	7	LUMBER	1,77	1,96	2,13	2,39	2,69	3,04	3,43	3,85	4,30	4,78	5,30
7	CCATAGS	8	FURNITURE	0,26	0,27	0,29	0,32	0,35	0,39	0,43	0,47	0,51	0,55	0,60
8	CCATAGS	9	STONE, CLAY AND GLASS	1,66	1,81	1,96	2,16	2,40	2,68	2,97	3,28	3,59	3,92	4,28
9	CCATAGS	10	PRIMARY METALS	3,85	4,14	4,45	4,79	5,18	5,60	6,05	6,52	7,01	7,51	8,00
10	CCATAGS	11	FABRICATED METAL PRODUCTS	1,69	1,83	1,96	2,15	2,37	2,60	2,86	3,12	3,40	3,68	3,97
11	CCATAGS	12	NONMETALLIC MINERAL PRODUCTS	5,33	5,98	6,65	7,32	8,02	8,75	9,51	10,29	11,09	11,99	12,89
12	CCATAGS	13	ELECTRICAL MACHINERY	4,21	5,03	5,55	6,31	7,18	8,15	9,19	10,29	11,45	12,68	13,99
13	CCATAGS	14	ELECTRICAL MACHINERY	2,96	3,20	3,46	3,87	4,30	4,72	5,15	5,63	6,15	6,69	7,21
14	CCATAGS	15	MOTOR VEHICLES	1,83	1,99	2,16	2,39	2,66	2,97	3,29	3,64	4,00	4,38	4,80
15	CCATAGS	16	NONAUTOTRANS EQ + MISC	1,11	1,24	1,36	1,53	1,73	1,95	2,19	2,45	2,72	3,02	3,33
16	CCATAGS	17	INSTRUMENTS	17,37	19,06	20,72	22,96	25,53	28,42	31,63	35,05	38,68	42,56	46,73
17	CCATAGS	18	FOOD AND BEVERAGES	3,40	3,67	3,92	4,27	4,64	5,03	5,45	5,92	6,42	6,97	7,59
18	CCATAGS	19	TOBACCO	0,31	0,48	0,53	0,60	0,68	0,76	0,85	0,95	1,06	1,17	1,29
19	CCATAGS	20	TEXTILES	1,32	1,43	1,54	1,71	1,90	2,13	2,37	2,63	2,89	3,16	3,43
20	CCATAGS	21	APPAREL	0,29	0,31	0,33	0,36	0,40	0,44	0,48	0,53	0,58	0,64	0,70
21	CCATAGS	22	PAPER	2,32	2,60	2,87	3,21	3,59	4,03	4,52	5,05	5,61	6,21	6,86
22	CCATAGS	23	PRINTING AND PUBLISHING	1,45	1,56	1,67	1,83	2,02	2,22	2,45	2,70	2,97	3,25	3,57
23	CCATAGS	24	CHEMICALS	5,25	5,79	6,34	7,03	7,83	8,75	9,80	10,91	12,08	13,34	14,70
24	CCATAGS	25	PETROLEUM	1,63	1,83	2,02	2,29	2,59	2,94	3,31	3,69	4,08	4,48	4,90
25	CCATAGS	26	RUBBER	1,18	1,28	1,39	1,56	1,76	2,00	2,25	2,53	2,84	3,17	3,52
26	CCATAGS	27	LEATHER	0,09	0,10	0,10	0,11	0,11	0,12	0,13	0,14	0,15	0,16	0,17
27	CCATAGS	28	TRANSPORTATION	9,82	10,71	11,60	12,47	13,39	14,37	15,43	16,55	17,76	19,08	20,56
28	CCATAGS	29	UTILITIES	13,33	14,98	16,67	18,45	21,30	24,04	27,06	30,29	33,72	37,34	41,25
29	CCATAGS	30	COMMUNICATIONS	12,40	14,19	15,92	18,12	20,65	23,53	26,70	30,07	33,64	37,44	41,55
30	CCATAGS	31	COMMERCIAL AND OTHER	77,22	86,28	94,17	105,78	118,88	133,18	148,45	165,07	182,44	200,13	218,03
31	CCATAGS	32	RES. STRUCTURES, SINGLE UNITS	0,86	0,86	0,86	0,86	0,86	0,86	0,86	0,86	0,86	0,86	0,86
32	CCATAGS	33	RES. STRUCTURES, MULTIPLE UNITS	1,06	1,06	1,06	1,06	1,06	1,06	1,06	1,06	1,06	1,06	1,06
33	CCATAGS	34	CAPITAL CONSUMPTION ADJUST.	18,12	21,43	24,11	25,11	26,11	27,11	28,11	29,11	30,11	31,11	32,11
34	CCATAGS	35	CORPORATE PROFITS & TAXES	0,35	0,35	0,35	0,35	0,35	0,35	0,35	0,35	0,35	0,35	0,35
35	CCATAGS	36	PROPRIETORS INCOME, TAXES	5,23	5,76	6,36	7,16	8,16	9,36	10,56	11,86	13,26	14,76	16,36
36	CCATAGS	37	PROPRIETORS INCOME, TAXES	20,94	23,08	25,08	27,08	29,08	31,08	33,08	35,08	37,08	39,08	41,08

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QUARTERLY ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 20.00 USER COST OF CAPITAL

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	UCKAG	39.11	43.5	44.7	48.4	52.5	54.8	57.9	60.7	63.1	65.9	69.2
2												
3	UCKMG	36.61	40.9	40.9	44.4	48.4	50.1	52.7	54.9	56.9	58.9	61.7
4												
5												
6	UCKMFD24	22.51	25.6	25.7	27.9	30.5	31.4	33.0	34.2	35.4	36.5	38.2
7	UCKMFD25	30.81	34.5	34.7	37.7	41.1	42.5	44.7	46.5	48.2	49.8	52.2
8	UCKMFD32	28.31	27.5	27.5	29.9	32.7	33.6	35.2	36.5	37.6	38.8	40.6
9	UCKMFD33	29.61	33.3	33.2	36.1	39.3	40.6	42.7	44.4	46.0	47.6	49.8
10	UCKMFD34	24.41	27.7	27.7	30.1	32.9	33.8	35.4	36.7	37.9	39.0	40.8
11	UCKMFD35	25.61	29.0	29.0	31.6	34.5	35.5	37.2	38.5	39.7	40.9	42.8
12	UCKMFD36	24.21	27.5	27.4	29.8	32.6	33.5	35.1	36.4	37.5	38.7	40.5
13	UCKMFD37	29.81	33.5	33.4	36.2	39.4	40.8	42.9	44.7	46.4	48.0	50.1
14	UCKMFD38	36.81	41.0	41.2	44.7	48.6	50.6	53.3	55.6	57.8	60.0	62.9
15	UCKMFD39	25.01	28.4	28.3	30.7	33.6	34.5	36.2	37.5	38.6	39.8	41.6
16	UCKMFD40											
17												
18												
19												
20	UCKMFD20	30.41	34.2	34.1	37.0	40.4	41.7	43.8	45.6	47.2	48.8	51.1
21	UCKMFD21	30.31	34.0	33.8	36.7	40.0	41.4	43.4	45.2	46.8	48.3	50.6
22	UCKMFD22	29.51	33.2	33.1	35.9	39.1	40.5	42.5	44.2	45.8	47.3	49.6
23	UCKMFD23	31.01	37.0	37.3	40.4	44.0	45.7	48.1	50.1	52.0	53.9	56.5
24	UCKMFD24	23.91	27.2	26.9	29.3	32.0	32.9	34.5	35.7	36.9	38.0	39.7
25	UCKMFD25	29.11	32.7	32.6	35.6	38.8	40.1	42.2	43.9	45.4	47.0	49.2
26	UCKMFD26	29.01	32.6	32.4	35.2	38.4	39.7	41.7	43.3	44.9	46.4	48.6
27	UCKMFD27	25.01	28.3	28.6	31.1	34.0	35.0	36.7	38.1	39.3	40.5	42.4
28	UCKMFD28	27.61	25.7	25.6	27.9	30.5	31.3	32.7	33.9	34.9	35.9	37.5
29	UCKMFD29	25.71	29.1	29.4	32.0	35.0	36.0	37.7	39.1	40.3	41.6	43.5
30	UCKMFD30											
31	UCKMFD31	30.21	33.9	34.3	37.2	40.6	41.9	44.1	45.8	47.4	48.9	51.2
32	UCKMFD32											
33	UCKMFD33	28.51	32.0	33.0	35.8	39.1	40.4	42.4	44.1	45.6	47.2	49.4
34	UCKMFD34											
35	UCKMFD35	27.91	31.5	31.4	34.2	37.5	38.4	40.1	41.4	42.6	43.7	45.7
36	UCKMFD36											
37	UCKMFD37	30.81	34.6	34.7	37.8	41.3	42.4	44.5	46.0	47.5	48.9	51.1
38	UCKMFD38											
39	UCKMFD39	16.41	19.3	21.1	23.1	25.1	26.4	27.9	29.2	30.5	31.7	33.2
40	UCKMFD40											
41	UCKMFD41	16.71	19.9	21.7	23.7	25.9	27.2	28.9	30.3	31.6	33.0	34.7
42	UCKMFD42	13.61	16.1	17.6	19.3	21.0	22.2	23.5	24.7	25.9	27.1	28.5
43	UCKMFD43	20.51	22.9	24.1	25.7	27.7	29.0	30.6	32.1	33.4	34.6	35.9

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QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 21.10 EMPLOYEE COMPENSATION (CURRENT \$)

LIFE	VAR LABEL	I T F M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	UNCS	I ALL INDUSTRIES	1299.811434.1	1563.5	1734.7	1921.6	2118.3	2319.2	2537.4	2752.7	2969.4	3191.8	
2	WACGVS	I AGRIC., FORESTRY AND FISHERIES	12.31	13.4	14.3	16.2	18.2	20.0	21.7	23.7	25.5	27.3	29.1
3	WACMGVS	I MINING	20.51	23.4	24.8	26.7	29.0	31.7	34.3	37.5	40.9	44.4	47.7
4	WACMFVS	I MANUFACTURING	365.81	408.9	450.0	498.0	551.3	608.3	656.1	715.4	770.1	822.0	874.7
5	WACMFVS	I DURABLE GOODS	217.11	266.8	295.7	330.8	369.3	406.6	442.0	484.0	521.5	556.9	592.9
6	WACMFVS	I LUMBER	8.91	9.7	10.6	11.8	13.3	14.8	16.4	18.0	19.6	21.2	22.9
7	WACMFVS	I FURNITURE	6.41	7.2	8.0	8.8	9.8	10.8	11.8	13.0	13.9	15.0	16.0
8	WACMFVS	I STONE, CLAY AND GLASS	12.61	14.5	16.4	18.2	20.2	22.3	24.3	26.7	28.9	31.0	33.1
9	WACMFVS	I PRIMARY METALS	30.51	34.1	37.4	41.0	46.0	51.1	56.7	59.0	62.5	65.2	67.8
10	WACMFVS	I FABRICATED METAL PRODUCTS	27.41	30.9	34.8	39.2	44.3	49.2	53.8	59.1	63.9	68.4	73.0
11	WACMFVS	I NONMETALLIC MINERAL PRODUCTS	45.91	50.9	57.2	64.9	73.4	81.7	89.3	98.6	106.7	114.3	122.1
12	WACMFVS	I ELECTRICAL MACHINERY	36.31	41.4	45.6	50.6	56.0	61.4	66.8	72.8	78.1	83.6	89.1
13	WACMFVS	I MOTOR VEHICLES	28.31	31.3	34.5	38.4	42.1	45.7	49.5	54.3	58.5	62.5	66.6
14	WACMFVS	I NONAUTOMOTIVE TRANSPORTATION	30.51	35.0	38.3	42.7	47.6	52.2	56.6	61.9	66.9	71.8	76.9
15	WACMFVS	I INSTRUMENTS	10.31	11.7	12.9	14.3	15.9	17.4	18.9	20.7	22.3	23.9	25.5
16	WACMFVS	I NONDURABLE GOODS	128.71	142.1	154.3	167.3	182.0	197.7	214.1	231.4	248.6	265.1	281.8
17	WACMFVS	I FOOD AND BEVERAGES	28.81	30.9	32.7	34.5	36.6	38.8	41.1	43.7	46.4	49.1	52.0
18	WACMFVS	I TOBACCO	1.31	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3
19	WACMFVS	I TEXTILES	10.81	11.8	12.9	14.2	15.8	17.6	19.3	21.3	23.1	24.9	26.5
20	WACMFVS	I APPAREL	12.81	14.4	15.6	17.0	18.6	20.4	22.2	24.1	25.8	27.5	29.0
21	WACMFVS	I PAPER	13.71	15.4	16.9	18.5	20.4	22.5	24.6	26.9	29.2	31.4	33.6
22	WACMFVS	I PRINTING AND PUBLISHING	18.21	20.7	22.9	25.3	27.8	30.6	33.5	36.6	39.8	42.9	46.1
23	WACMFVS	I CHEMICALS	23.81	26.1	28.1	30.0	32.1	34.4	36.9	39.5	42.2	44.7	47.1
24	WACMFVS	I PETROLEUM	5.61	6.3	6.9	7.5	8.1	8.6	9.1	9.6	10.1	10.5	10.9
25	WACMFVS	I RUBBER	11.01	12.2	13.5	15.1	16.9	18.7	20.5	22.5	24.4	26.3	28.1
26	WACMFVS	I LEATHER	2.71	3.0	3.4	3.7	4.0	4.4	4.7	5.1	5.5	5.8	6.2
27	WACMGVS	I TRANSPORTATION	55.81	60.6	65.8	72.0	79.5	87.9	96.6	106.1	116.4	127.3	137.6
28	WACMGVS	I UTILITIES	17.11	18.6	20.1	21.6	23.2	25.2	27.3	29.7	31.8	33.9	36.0
29	WACMGVS	I COMMUNICATIONS	29.51	32.1	34.7	39.5	42.5	46.3	50.2	55.1	60.9	66.7	72.4
30	WACMGVS	I COMMERCIAL AND OTHER	545.01	603.1	657.1	736.6	822.6	913.5	1007.6	1107.0	1206.5	1310.0	1419.6
31	WACMGVS	I GOVERNMENT	253.51	274.2	296.8	324.1	355.2	389.5	425.3	462.9	500.6	537.7	574.7
32	WACMGVS	I FEDERAL	88.31	94.8	101.9	110.3	119.6	129.7	140.6	151.7	162.8	173.6	184.2
33	WACMGVS	I STATE AND LOCAL	165.21	179.4	194.9	213.8	235.6	259.8	284.7	311.2	337.9	364.1	390.5

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CHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 1978-1979 PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 21.20 EMPLOYEE COMPENSATION, GROWTH RATES

LINE	VAR LABEL	TYPE	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	WACGS	I ALL INDUSTRIES	12.71	10.4	9.0	10.9	10.8	10.2	9.5	9.4	8.5	7.9	7.5
2													
3	WACAGS	I AGRIC., FORESTRY AND FISHERIES	9.41	9.0	6.8	13.5	12.1	10.2	8.7	8.8	7.7	7.1	6.7
4													
5	WACMGS	I MINING	16.21	14.1	6.0	7.5	8.9	9.1	8.3	9.2	9.1	8.6	7.5
6													
7	WACMFS	I MANUFACTURING	13.31	11.8	10.1	10.7	10.7	9.6	8.6	9.0	7.6	6.7	6.4
8													
9	WACMFOS	I DURABLE GOODS	14.01	12.5	10.8	11.8	11.7	10.1	8.7	9.5	7.7	6.8	6.5
10													
11	WACMF243	I LUMBER	10.81	9.0	8.7	11.7	12.3	11.6	10.6	9.6	9.0	8.3	7.8
12	WACMF253	I FURNITURE	12.01	12.6	11.0	10.2	11.1	9.9	9.3	10.2	7.2	7.7	6.8
13	WACMF123	I STONE, CLAY AND GLASS	15.01	15.2	13.2	10.7	11.2	10.2	9.0	9.8	8.4	7.1	6.7
14	WACMF333	I PRIMARY METALS	12.41	11.8	10.0	11.5	12.0	9.3	6.9	8.0	5.8	4.3	4.1
15	WACMF343	I FABRICATED METAL PRODUCTS	15.71	12.6	12.9	12.9	12.9	11.0	9.3	10.0	8.1	7.0	6.6
16	WACMF353	I NONELECTRICAL MACHINERY	17.11	10.9	12.5	13.4	13.2	11.2	9.3	10.4	8.2	7.1	6.8
17	WACMF363	I ELECTRICAL MACHINERY	16.01	14.2	10.0	10.9	10.8	9.7	8.7	9.0	7.6	6.8	6.6
18	WACMF3713	I MOTOR VEHICLES	13.41	10.5	10.1	11.4	9.4	8.6	8.4	9.6	7.8	6.8	6.6
19	WACMF37SP28	I NONAUTO TRANS FU + DRD + MISC	15.01	14.9	9.3	11.6	11.3	9.7	8.6	9.3	8.1	7.2	7.1
20	WACMF383	I INSTRUMENTS	14.21	13.8	10.3	10.8	10.8	9.7	8.8	9.2	8.0	7.2	6.9
21													
22	WACMFNS	I NONDURABLE GOODS	10.61	10.4	8.6	8.4	8.8	8.7	8.3	8.1	7.4	6.7	6.3
23													
24	WACMF203	I FOOD AND BEVERAGES	13.51	7.2	5.8	5.6	6.0	6.1	6.1	6.1	6.2	5.9	6.0
25	WACMF213	I TOBACCO	10.51	7.6	6.3	6.7	6.7	6.6	6.2	6.0	4.9	4.2	4.0
26	WACMF223	I TEXTILES	8.81	8.9	9.1	10.7	11.3	10.8	10.2	9.9	8.8	7.7	6.6
27	WACMF233	I APPAREL	10.81	11.0	8.7	8.9	9.7	9.7	9.7	8.8	7.3	6.3	5.7
28	WACMF263	I PAPER	11.91	12.5	9.6	9.8	10.3	10.2	9.5	9.2	8.5	7.4	7.1
29	WACMF273	I PRINTING AND PUBLISHING	11.01	13.7	10.7	10.3	9.9	10.0	9.6	9.3	8.6	7.8	7.4
30	WACMF283	I CHEMICALS	8.71	9.6	7.9	6.6	7.1	7.1	7.4	7.2	6.6	6.0	5.5
31	WACMF293	I PETROLEUM	8.81	12.3	9.6	8.1	7.6	7.0	6.1	5.5	4.7	4.1	3.7
32	WACMF303	I RUBBER	6.61	11.2	10.8	11.5	11.8	10.9	9.8	9.8	8.5	7.5	7.0
33	WACMF313	I LEATHER	12.51	12.6	12.2	9.4	9.2	8.8	8.0	7.7	7.1	6.3	6.0
34													
35	WACRGTS	I TRANSPORTATION	10.21	8.6	8.6	9.5	10.5	10.6	9.9	9.9	9.7	9.4	8.1
36													
37	WACRGU493	I UTILITIES	12.01	8.6	8.2	7.5	7.7	8.3	8.5	8.6	7.3	6.7	6.1
38													
39	WACRGCC483	I COMMUNICATIONS	16.01	8.7	8.3	14.0	7.4	9.0	8.5	9.8	10.4	9.6	8.5
40													
41	WACCC03	I COMMERCIAL AND OTHER	10.01	10.7	9.0	12.1	11.7	11.0	10.3	9.9	9.0	8.6	8.4
42													
43	WACGV3	I GOVERNMENT	8.91	8.2	8.2	9.2	9.6	9.7	9.2	8.8	8.2	7.4	6.9
44													
45	WACGV63	I FEDERAL	8.71	7.4	7.5	8.2	8.4	8.5	8.4	7.9	7.3	6.7	6.1
46	WACGV53	I STATE AND LOCAL	9.01	8.6	8.6	9.7	10.2	10.3	9.6	9.3	8.6	7.8	7.3

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 HIGHLY PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 22.10 WAGE RATES (CURRENT \$)

LINE	VAR LABEL	I	T	F	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	WRCG	I				265.11	286.15	306.59	331.48	358.71	387.90	418.36	450.78	482.84	514.50	546.54
2	WRCAGS	R				71.22	81.22	89.12	99.93	110.06	119.95	130.21	142.09	154.04	166.14	178.28
3	WRCMG	R				10.55	11.86	12.89	14.05	15.34	16.78	18.31	19.90	21.51	23.14	24.76
4																
5																
6																
7																
8																
9	WRCHFD245	R				6.46	7.00	7.59	8.28	9.02	9.80	10.62	11.45	12.27	13.08	13.90
10	WRCHFD251	R				5.88	6.39	6.89	7.49	8.12	8.78	9.45	10.14	10.81	11.47	12.14
11	WRCHFD321	R				8.42	9.28	10.12	11.03	12.01	13.07	14.18	15.31	16.45	17.56	18.74
12	WRCHFD331	R				11.37	12.44	13.49	14.62	15.82	17.05	18.30	19.56	20.78	21.97	23.20
13	WRCHFD341	R				8.44	9.29	10.23	11.20	12.21	13.29	14.44	15.64	16.83	18.00	19.23
14	WRCHFD351	R				9.26	10.08	10.96	11.94	12.95	14.03	15.18	16.36	17.56	18.73	20.00
15	WRCHFD361	R				8.46	9.26	10.10	11.05	12.02	13.05	14.15	15.29	16.43	17.56	18.77
16	WRCHFD371	R				13.39	14.58	15.96	17.45	18.88	20.46	22.31	24.38	26.54	28.78	31.19
17	WRCHFD37SP23	R				9.28	10.20	11.11	12.11	13.16	14.28	15.46	16.68	17.89	19.09	20.38
18	WRCHFD381	R				8.86	9.63	10.46	11.35	12.29	13.29	14.33	15.40	16.45	17.49	18.55
19																
20																
21																
22	WRCHFN201	R				7.96	8.67	9.35	10.08	10.86	11.69	12.54	13.41	14.28	15.12	16.00
23	WRCHFN211	R				9.14	9.96	10.74	11.59	12.48	13.41	14.36	15.31	16.23	17.11	18.03
24	WRCHFN221	R				5.30	5.80	6.38	7.00	7.69	8.43	9.21	10.01	10.81	11.58	12.36
25	WRCHFN231	R				5.35	5.84	6.40	6.94	7.59	8.33	9.12	9.93	10.75	11.54	12.34
26	WRCHFN261	R				6.71	7.65	8.61	9.65	10.76	11.90	13.09	14.34	15.60	16.83	18.03
27	WRCHFN271	R				8.19	9.03	9.86	10.73	11.65	12.62	13.63	14.65	15.66	16.63	17.63
28	WRCHFN281	R				10.25	11.16	12.00	12.93	13.91	14.94	16.01	17.09	18.16	19.22	20.28
29	WRCHFN291	R				12.09	13.24	14.36	15.62	16.93	18.29	19.67	21.05	22.41	23.75	25.13
30	WRCHFN301	R				7.51	8.18	8.86	9.61	10.39	11.22	12.09	12.97	13.85	14.70	15.59
31	WRCHFN311	R				5.11	5.65	6.16	6.70	7.32	8.00	8.72	9.46	10.20	10.92	11.67
32	WRCHG11	R				398.52	424.84	458.66	494.82	535.67	580.92	629.30	679.94	731.88	784.94	840.05
33																
34	WRCHG491	R				427.93	458.03	498.69	540.07	584.92	634.61	688.11	744.54	802.52	861.21	922.49
35																
36	WRCHG491	R				453.76	489.00	530.87	578.43	629.39	684.01	742.58	803.42	865.16	929.07	995.03
37																
38	WRCCG1	R				211.75	227.70	242.75	262.26	283.94	307.35	331.97	357.71	383.59	409.70	436.46
39																
40	WRG11	R				274.95	292.88	310.39	335.81	363.53	393.66	424.70	456.87	487.91	517.84	547.16
41																
42	WRG11	R				308.27	337.58	368.01	403.79	443.79	483.28	525.13	569.66	619.94	680.80	720.45
43																
44	WRG11	R				297.16	326.35	356.59	390.82	425.14	462.62	500.55	540.83	582.47	624.48	664.91
45																

A PRODUCT OF WHARTON FEA, INC., 3629 PARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

SHORT-TERM AND INDUSTRY FORECASTING MODEL  
 HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 22.20 WAGE RATES, % CHANGE

LINE	VAR LABEL	J	T	F	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	WRES				8.21	7.9	7.1	8.1	8.2	8.1	7.9	7.8	7.1	6.6	6.2
2	WRCAGS	B	FARM (PER WEEK)		7.31	14.0	9.7	12.1	10.1	9.0	8.6	9.1	8.4	7.9	7.3
3	WRCAGS	B	MINING (PER HOUR)		15.81	12.5	8.7	9.0	9.2	9.4	9.1	8.7	8.1	7.6	7.0
4															
5	WRCAGS	B	DURABLE GOODS (PER HOUR)												
6															
7															
8	WRCMFD243	B	LUMBER		7.31	8.5	8.3	9.1	8.9	8.7	8.3	7.8	7.2	6.6	6.3
9	WRCMFD253	B	FURNITURE		6.71	8.7	7.9	8.7	8.4	8.1	7.7	7.2	6.7	6.1	5.9
10	WRCMFD323	B	STONE, CLAY AND GLASS		8.71	10.3	9.1	8.9	8.9	8.8	8.5	8.0	7.4	6.8	6.7
11	WRCMFD333	B	PRIMARY METALS		7.91	9.5	8.4	8.4	8.2	7.8	7.3	6.9	6.3	5.7	5.6
12	WRCMFD343	B	FABRICATED METAL PRODUCTS		10.01	10.1	10.2	9.4	9.0	8.9	8.7	8.3	7.6	7.0	6.8
13	WRCMFD353	B	NON-ELECTRICAL MACHINERY		11.91	8.9	8.7	8.9	8.5	8.3	8.2	7.8	7.3	6.7	6.7
14	WRCMFD363	B	ELECTRICAL MACHINERY		9.41	9.4	9.1	9.3	8.8	8.6	8.4	8.0	7.5	6.9	6.9
15	WRCMFD373	B	MOTOR VEHICLES		9.51	8.9	9.5	9.3	8.2	8.3	9.1	9.3	8.9	8.4	8.4
16	WRCMFD383	B	NON-AUTO TRANS (CO + MISC)		8.11	9.9	9.0	8.9	8.7	8.5	8.3	7.8	7.3	6.7	6.8
17	WRCMFD393	B	INSTRUMENTS		8.91	8.8	8.5	8.6	8.3	8.1	7.9	7.4	6.9	6.3	6.1
18															
19															
20															
21	WRCMFD203	B	FOOD AND BEVERAGES		11.91	8.9	7.9	7.8	7.7	7.6	7.3	6.9	6.4	5.9	5.8
22	WRCMFD213	B	TOBACCO		10.31	9.0	7.8	7.9	7.7	7.5	7.1	6.6	6.0	5.4	5.4
23	WRCMFD223	B	TEXTILES		9.81	9.5	9.9	9.8	9.8	9.6	9.3	8.7	7.9	7.1	6.8
24	WRCMFD233	B	APPAREL		9.41	10.1	8.7	8.5	9.3	9.7	9.4	8.9	8.2	7.4	6.9
25	WRCMFD243	B	PAPER		10.81	10.7	8.5	8.0	8.5	8.8	8.6	8.3	7.8	7.1	7.1
26	WRCMFD253	B	PRINTING AND PUBLISHING		9.31	10.3	9.2	8.8	8.5	8.4	8.0	7.5	6.9	6.2	6.0
27	WRCMFD263	B	CHEMICALS		7.41	8.9	7.5	7.8	7.6	7.4	7.1	6.8	6.3	5.8	5.5
28	WRCMFD273	B	PETROLEUM		9.31	9.5	8.4	8.8	8.4	8.0	7.5	7.0	6.4	6.0	5.8
29	WRCMFD283	B	RUBBER		4.91	8.9	8.3	8.4	8.1	8.0	7.7	7.3	6.8	6.2	6.0
30	WRCMFD293	B	LEATHER		9.41	10.2	9.0	8.8	9.2	9.3	9.0	8.5	7.8	7.1	6.8
31	WRCMFD303	B													
32	WRCMFD313	B	TRANSPORTATION (PER WEEK)		9.71	6.6	8.0	7.9	8.3	8.4	8.3	8.0	7.6	7.2	7.0
33	WRCMFD323	B	UTILITIES (PER WEEK)		8.61	7.0	8.9	8.3	8.3	8.5	8.4	8.2	7.8	7.3	7.1
34	WRCMFD333	B	COMMUNICATIONS (PER WEEK)		8.71	7.8	8.6	9.0	8.8	8.7	8.6	8.2	7.7	7.4	7.1
35	WRCMFD343	B	COMMERCIAL AND OTHER (PER WEEK)		8.51	7.5	6.6	8.0	8.3	8.2	8.0	7.8	7.2	6.8	6.5
36	WRCMFD353	B	GOVERNMENT (PER WEEK)		6.41	6.5	6.0	8.2	8.3	8.3	7.9	7.6	6.8	6.1	5.7
37	WRCMFD363	B	FEDERAL		8.41	7.8	7.8	8.1	8.3	8.3	8.2	7.7	7.1	6.4	5.8
38	WRCMFD373	B	STATE AND LOCAL		5.71	6.1	5.4	8.4	8.4	8.5	7.9	7.7	6.8	6.2	5.7

A PRODUCT OF MARTIN EFA, INC., 3624 MARKET ST., PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



QUARTERLY ANNUAL AND INDUSTRY FORECASTING MODEL  
WICOR PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 23.10 PRICE DEFATORS (1972 = 100)

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 POCGP	152.11	162.9	173.2	185.3	198.1	211.6	225.2	238.7	251.6	263.8	275.4
2											
3 PDYH	152.11	162.9	173.2	185.3	198.1	211.6	225.2	238.7	251.6	263.8	275.4
4											
5 POCF	150.41	160.9	171.3	183.1	195.2	207.8	220.8	232.6	244.3	255.4	265.9
6 POCEN	136.71	144.9	152.6	161.5	169.7	178.1	186.3	194.2	201.7	209.0	215.8
7 POCEN	146.01	158.3	169.5	178.8	187.2	196.8	207.2	217.1	227.0	237.9	248.1
8 POCEN	130.91	148.6	157.1	166.6	173.5	181.1	189.3	197.0	204.9	212.7	220.6
9 POCEN	193.81	216.7	241.9	257.4	270.3	285.2	301.5	319.1	337.3	356.0	372.3
10 POCEN	130.91	149.5	159.3	170.0	181.5	193.6	206.2	218.3	230.5	242.6	254.5
11 POCEN	132.91	143.9	154.3	164.3	174.6	185.1	196.0	206.7	216.7	226.3	235.6
12 POCEN	128.61	134.7	139.9	147.8	155.4	162.8	169.9	176.4	182.3	187.7	192.7
13 POCEN	132.81	134.1	145.0	153.3	161.7	170.0	178.1	185.7	192.5	198.8	204.5
14 POCEN	155.01	165.0	174.6	185.1	196.5	208.3	220.1	231.8	242.7	252.7	262.1
15 POCEN	162.91	175.9	188.3	199.2	211.4	224.5	237.9	251.6	264.6	276.3	287.2
16 POCEN	125.91	130.3	134.6	141.9	149.5	157.2	164.6	171.4	177.4	182.8	187.4
17 POCEN	180.61	192.8	205.0	220.9	237.3	254.2	270.9	287.5	303.7	319.6	335.5
18 POCEN	155.31	164.5	173.5	185.2	197.4	209.8	222.3	234.4	245.9	256.9	267.5
19 POCEN	151.31	163.0	175.2	189.1	203.5	218.4	233.2	247.8	261.7	275.1	287.9
20 POCEN	141.41	153.1	165.6	178.3	191.8	205.5	218.8	231.6	243.4	255.5	268.7
21 POCEN	157.31	168.2	179.1	191.0	201.4	211.9	222.4	232.6	242.0	250.9	259.2
22 POCEN	154.41	165.6	177.2	190.7	205.2	220.7	236.5	252.0	267.3	282.5	297.2
23 POCEN	157.21	169.3	181.6	197.0	213.6	230.6	248.4	265.9	282.9	299.5	315.7
24											
25 PDIAF	164.71	178.9	192.0	207.3	223.1	239.3	255.8	272.9	289.5	305.1	320.3
26											
27 PDIAF	158.01	171.2	182.4	196.2	210.5	225.4	240.8	256.0	271.3	286.4	301.7
28 PDIAF	178.01	200.6	221.2	240.5	260.0	280.5	301.3	321.0	340.6	360.1	379.5
29 PDIAF	179.71	202.1	223.4	243.0	262.7	283.6	304.9	324.7	344.7	364.8	384.8
30 PDIAF	179.41	201.1	221.8	234.8	247.9	260.9	273.8	287.0	300.1	313.3	327.4
31 PDIAF	159.21	170.3	180.5	191.4	205.1	219.3	233.6	247.4	260.3	272.5	283.9
32											
33											
34											
35 PHSRPS1	4.5941	5.034	5.362	5.680	6.451	7.038	7.703	8.418	9.077	9.743	10.385
36 PHSRPSM	2.5201	2.703	2.892	3.065	3.269	3.528	3.820	4.092	4.380	4.728	5.096
37 PHSRPSM	1.6791	1.826	2.021	2.222	2.437	2.672	2.883	3.127	3.410	3.652	3.797
38											
39 PTER	190.61	201.9	212.3	225.6	239.9	255.2	270.5	285.7	300.1	313.7	326.6
40 PTH	219.41	236.9	254.6	270.8	286.4	300.8	315.0	329.6	344.4	359.9	375.1
41											
42 PDGVT	157.61	168.3	178.6	191.0	204.4	218.5	233.0	247.7	261.9	275.6	289.2
43 PDGVT	153.21	163.0	172.8	185.0	197.7	210.8	224.0	237.1	249.8	262.1	274.1
44 PDGVS	160.21	171.3	181.9	194.5	208.1	222.9	238.1	253.6	268.6	283.1	297.6
45											
46											
47 PIRC	65.31	69.7	74.1	79.9	85.8	91.8	97.8	103.7	109.4	115.0	120.5
48 PIRTS	8.61	8.8	9.0	9.2	9.4	9.5	9.7	9.9	10.1	10.3	10.5
49 PIRTS	4.01	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
50 PIRTS	52.71	56.9	61.1	66.7	72.4	78.3	84.0	89.7	95.3	100.6	106.0

A PRODUCT OF MARQUETTE, L.L., 3024 CROFT ST., DALLAS, TX 75204. ALL OTHER PERMISSIONS MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

QUARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 23.20 PRICE DEFLATORS, GROWTH RATES

LINE VAR LABEL	I T F D	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 PGDGP	I GROSS NATIONAL PRODUCT	7.41	7.1	6.3	7.0	6.9	6.8	6.4	6.0	5.4	4.8	4.4
2												
3 PDYII	B NATIONAL INCOME	6.91	7.1	6.3	7.0	6.9	6.8	6.4	6.0	5.4	4.8	4.4
4												
5 PDCE	I PERSONAL CONSUMPTION	6.91	7.0	6.5	6.8	6.6	6.4	6.0	5.6	5.0	4.5	4.1
6 PDCEA	I DURABLE GOODS	5.51	6.0	5.3	5.8	5.1	4.9	4.6	4.2	3.9	3.6	3.3
7 PDCEDA	I AUTOS AND PARTS	7.51	8.4	7.0	5.5	4.7	5.1	5.3	4.8	4.0	4.6	4.3
8 PDCEDAVN	R NEW CARS	8.01	7.0	5.7	6.0	4.2	4.4	4.5	4.1	4.0	3.8	3.7
9 PDCEDAVII	B USED CARS	6.31	11.8	11.6	6.6	4.8	5.5	5.7	5.9	5.7	5.6	4.6
10 PDCEDAVRI	B RECREATIONAL VEH. AND TRUCKS	8.01	7.6	6.5	6.7	6.7	6.7	6.5	5.9	5.6	5.2	4.9
11 PDCEDAPI	R TIRES, TUBES AND PARTS	6.81	8.3	7.2	6.5	6.2	6.1	5.9	5.4	4.8	4.4	4.1
12 PDCEDF	B FURNITURE AND HOUSEHOLD EQUIPMENT	3.91	4.7	3.9	5.6	5.2	4.8	4.3	3.9	3.3	3.0	2.6
13 PDCEDD	B OTHER DURABLE GOODS	4.61	4.8	4.2	5.7	5.5	5.2	4.8	4.2	3.7	3.3	2.9
14 PDCEFN	I NONDURABLE GOODS	6.91	6.4	5.8	6.0	6.1	6.0	5.7	5.3	4.7	4.1	3.7
15 PDCENF	R FOOD AND BEVERAGES	9.71	7.9	7.1	5.7	6.1	6.2	6.0	5.8	5.1	4.4	3.9
16 PDCENC	B CLOTHING AND SHOES	3.01	3.5	3.3	5.4	5.4	5.1	4.7	4.1	3.5	3.0	2.5
17 PDCENG	B GASOLINE AND OIL	3.61	6.7	6.4	7.8	7.4	7.1	6.6	6.1	5.6	5.2	5.0
18 PDCENDH	B OTHER NONDURABLE GOODS	5.61	5.9	5.5	6.7	6.6	6.3	6.0	5.4	4.9	4.5	4.1
19 PDCEH	I SERVICES	7.31	7.7	7.5	7.9	7.6	7.3	6.8	6.3	5.6	5.1	4.7
20 PDCEH	B HOUSING	7.51	8.3	8.2	7.7	7.6	7.1	6.5	5.9	5.1	4.5	4.0
21 PDCEH9	B HOUSEHOLD OPERATION SERVICES	6.91	6.9	6.5	6.6	5.5	5.2	4.9	4.6	4.1	3.6	3.3
22 PDCEH7	B TRANSPORTATION SERVICES	7.71	7.2	7.0	7.6	7.6	7.5	7.2	6.6	6.1	5.7	5.2
23 PDCEH0	B OTHER SERVICES	7.31	7.7	7.3	8.5	8.4	8.1	7.6	7.0	6.4	5.9	5.4
24												
25 PDIBF	I FIXED INVESTMENT	9.41	8.6	7.3	7.9	7.7	7.2	6.9	6.7	6.1	5.4	5.0
26												
27 PDIBFN	R NONRESIDENTIAL	8.21	7.9	6.5	7.6	7.3	7.1	6.8	6.3	6.0	5.6	5.3
28 PDIBFR	B RESIDENTIAL	12.11	12.3	10.3	8.7	8.1	7.9	7.4	6.5	6.1	5.7	5.4
29 PDIBFRN	I NONFARM	12.31	12.5	10.5	8.8	8.1	8.0	7.5	6.5	6.2	5.8	5.5
30 PDIBFRF	F FARM	12.31	12.1	10.3	5.8	5.6	5.2	5.0	4.8	4.6	4.4	4.5
31 PDIBFRSNH	B IMPLICIT DEFLATOR, NON. HOMES	8.01	7.0	6.0	6.0	7.1	6.9	6.5	5.9	5.2	4.7	4.2
32												
33	AVERAGE VALUE OF HOUSING, STARTS											
34 PIMSRSI	B SINGLES	20.61	9.6	6.5	9.7	9.7	9.1	9.4	9.3	7.8	7.3	6.6
35 PIMSRSM	R MULTIPLES	29.01	7.3	7.0	6.0	6.6	7.9	8.3	7.1	7.0	6.0	7.8
36 PIMSPRHM	B MOBILE HOMES	15.21	8.7	10.7	10.0	9.7	9.6	7.9	8.5	9.0	7.1	4.0
37												
38 PTER	I EXPORTS	6.71	5.9	5.1	6.3	6.3	6.4	6.0	5.6	5.0	4.5	4.1
39 PTM	I IMPORTS	4.31	7.9	7.5	6.4	5.8	5.0	4.7	4.7	4.5	4.2	4.5
40												
41 PDGVPY	I GOVERNMENT PURCH OF GOODS & SERV	7.01	6.7	6.1	7.0	7.0	6.9	6.7	6.3	5.7	5.3	4.9
42 PDGVPF	R FEDERAL	7.31	6.4	6.0	7.1	6.9	6.6	6.3	5.9	5.3	4.9	4.6
43 PDGVPS	R STATE AND LOCAL	7.91	6.9	6.2	6.9	7.0	7.1	6.8	6.5	5.9	5.4	5.1
44												
45	RETAIL UNIT PRICES, GASOLINE											
46 PIRG	I REG. GRADE GASOLINE, INCL. TAXES	3.61	6.7	6.4	7.7	7.4	7.0	6.5	6.0	5.5	5.1	4.8
47 PIRGT9	E STATE AND LOCAL TAXES	2.71	2.3	2.3	2.0	1.9	1.9	1.9	2.1	2.0	2.0	1.9
48 PIRGT0	E FEDERAL TAXES	0.61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49 PIRGX	R REG. GRADE GASOLINE, EXCL. TAXES	4.01	7.9	7.0	9.1	8.6	8.1	7.4	6.8	6.1	5.7	5.3

A PRODUCT OF MARTIN CEE, INC., 3624 MARKET ST., PHILIA, PA 19104. \*WITHIN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

CHARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 25.00 GROSS NATIONAL PRODUCT, NATIONAL INCOME, PERSONAL INCOME

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 GNP	2105.7	2308.1	2509.9	2805.0	3131.2	3463.8	3793.7	4175.6	4533.5	4888.3	5239.0
2 CCATS	217.1	242.2	265.9	294.7	327.1	362.7	401.0	441.8	484.6	528.9	575.1
3 CCATS	217.1	242.2	265.9	294.7	327.1	362.7	401.0	441.8	484.6	528.9	575.1
4											
5 GNP	1888.7	2065.9	2244.0	2510.3	2804.1	3101.1	3392.7	3733.8	4049.0	4359.3	4663.9
6											
7 TXCRS	177.9	188.3	202.0	216.9	238.7	264.6	292.2	319.5	343.7	368.4	386.7
8											
9 TXCRS	27.8	29.0	29.9	29.5	33.1	36.7	40.2	44.2	47.8	51.3	47.9
10 TXCRS	150.1	159.3	172.1	187.4	205.5	227.9	252.1	275.3	295.9	317.0	338.8
11											
12 TRBUS	10.7	11.8	13.0	13.8	14.6	15.4	16.2	17.0	17.8	18.6	19.4
13											
14 SDS	2.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
15											
16 GVBURTS	3.9	3.5	3.5	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
17											
18 YNS	1701.9	1866.3	2029.5	2281.4	2552.6	2822.8	3086.0	3399.1	3689.2	3974.1	4259.5
19											
20 CPARTS	161.5	170.3	186.8	230.7	270.6	302.3	324.3	369.9	402.7	431.7	459.9
21											
22 TXCRS	164.0	188.7	202.9	223.9	249.4	276.4	304.3	335.0	365.8	397.3	430.1
23 TXCRS	69.4	77.2	78.1	86.2	96.0	106.4	117.2	129.0	140.8	153.0	165.6
24 SUPLES	94.5	111.5	124.8	137.7	153.4	170.0	187.2	206.0	225.0	244.4	264.5
25											
26 WALDS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27											
28 TRTOPS	226.7	254.5	287.3	314.7	345.5	380.0	417.6	456.7	498.2	541.3	585.3
29											
30 TRGFS	182.3	204.3	230.6	252.2	276.8	304.6	335.3	367.4	401.8	437.7	474.4
31 TRTOPS	9.2	9.8	10.7	9.0	7.2	6.4	6.7	6.9	8.3	10.2	11.7
32 TRGFS	173.1	194.5	219.9	243.3	269.6	298.2	328.6	360.5	393.5	427.5	462.7
33 TRGFS	33.7	38.4	43.6	48.7	54.1	60.0	66.1	72.3	78.6	85.0	91.5
34 TRBUS	10.7	11.8	13.0	13.8	14.6	15.4	16.2	17.0	17.8	18.6	19.4
35											
36 YINTGS	52.9	63.2	70.6	75.8	80.3	84.4	88.3	91.8	95.2	97.9	100.6
37											
38 YINTGS	33.7	38.3	42.3	45.3	48.3	51.3	54.3	57.3	60.3	63.3	66.3
39 YINTGS	35.5	41.3	44.8	47.0	48.5	49.6	50.5	51.0	51.4	51.1	50.8
40 YINTGS	-7.7	-9.3	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7
41											
42 YINTGS	49.3	56.1	63.2	71.2	80.0	89.1	98.4	108.4	118.7	129.1	139.7
43											
44 YPS	1705.3	1881.1	2060.9	2288.6	2538.4	2797.6	3061.6	3351.1	3652.8	3913.3	4195.0

A PRODUCT OF CHARTER (PA, INC.), 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



WHARION ANNUAL AND INDUSTRY FORECASTING MODEL  
 HICUP PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 26.00 NATIONAL INCOME (CURRENT \$)

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 YNS	1701.9	1866.3	2029.5	2281.4	2552.6	2822.8	3086.0	3399.1	3689.2	3974.1	4259.5
2 WHCS	1299.4	1434.1	1583.5	1734.7	1921.6	2110.3	2319.2	2537.4	2752.7	2969.4	3191.8
3 YENTIS	24.3	28.1	30.7	32.7	34.7	36.7	38.7	40.7	42.7	44.7	47.1
4											
5 YENTIS	24.3	28.1	30.7	32.7	34.7	36.7	38.7	40.7	42.7	44.7	47.1
6											
7 YOTHS	239.2	257.8	274.9	312.5	357.4	399.7	440.3	489.7	531.6	570.7	604.8
8 CCAAYENTS	-20.9	-23.1	-25.1	-27.1	-29.1	-31.1	-33.1	-35.1	-37.1	-39.1	-41.1
9 IVAUS	-1.9	-1.3	-1.7	-2.5	-2.9	-3.4	-3.7	-3.9	-3.8	-3.6	-3.5
10 CCAAYENTS	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
11											
12 CPANTS	161.5	170.3	186.8	230.7	270.6	302.3	324.3	369.9	402.7	431.7	459.9
13											
14 IVACS	-23.0	-20.4	-19.5	-26.8	-31.1	-35.8	-38.3	-40.4	-39.6	-37.8	-36.4
15 CCAACPS	-18.1	-21.4	-24.1	-25.1	-26.1	-27.1	-28.1	-29.1	-30.1	-31.1	-32.1
16											
17 CPURTS	202.6	212.1	230.4	282.6	327.8	365.2	396.7	434.5	472.4	500.6	528.4
18 TXCCIS	83.7	82.9	83.7	104.9	123.9	139.2	150.2	170.7	185.3	198.2	210.4
19 CPUATS	118.9	129.2	146.7	177.7	204.0	226.0	240.5	268.7	287.1	302.4	318.1
20 YDIVTS	49.3	56.1	63.2	71.2	80.0	89.1	98.4	108.4	118.7	129.1	139.7
21 RETS	69.6	73.2	83.6	106.5	124.0	136.8	142.1	160.3	168.4	173.3	178.4

A PRODUCT OF WHARION EFA, INC., 3624 MARKET ST., PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

CHARTER ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 27.00 PERSONAL INCOME (CURRENT \$)

LINE	VAR LABEL	I	T	F	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	YPS	I			1705.3	1188.1	2060.9	2288.6	2538.6	2797.6	3061.6	3351.1	3632.8	3913.3	4195.0
2															
3	WBCS	I			1299.4	1149.1	1563.5	1734.7	1921.6	2118.3	2319.2	2537.4	2752.7	2969.4	3191.8
4	WALDS	F			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5															
6	YOTHS	B			239.2	257.8	274.9	312.5	357.4	399.7	440.3	489.7	531.6	570.7	608.8
7	IVALS	H			-1.9	-1.3	-1.7	-2.5	-2.9	-3.4	-3.7	-3.9	-3.8	-3.6	-3.5
8															
9	YEITFS	E			20.3	28.1	30.7	32.7	34.7	36.7	38.7	40.7	42.7	44.7	47.1
10															
11	YDIVTS	B			49.3	56.1	63.2	71.2	80.0	89.1	98.4	108.4	118.7	129.1	139.7
12															
13	YINTGCS	I			52.95	63.15	70.62	75.79	80.29	84.39	88.29	91.79	95.19	97.89	100.59
14															
15	YINTCS	E			33.7	38.3	42.3	45.3	48.3	51.3	54.3	57.3	60.3	63.3	66.3
16	YINTGCS	E			-2.7	-9.3	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7
17	YINTGFS	E			35.5	41.3	44.8	47.0	48.5	49.6	50.5	51.0	51.4	51.1	50.8
18															
19	YTRIPS	I			226.7	254.5	287.3	314.7	345.5	380.0	417.6	456.7	498.2	541.3	585.3
20															
21	YTRUS	E			10.7	11.8	13.0	13.8	14.6	15.4	16.2	17.0	17.8	18.6	19.4
22	YTRFCS	I			182.3	204.3	230.6	252.2	276.8	304.6	335.3	367.4	401.8	437.7	474.4
23	YTRIPUS	B			9.2	9.8	10.7	9.0	7.2	6.4	6.7	6.9	8.3	10.2	11.7
24	YTRFPOTHS	I			173.1	194.5	219.9	243.3	269.6	298.2	328.6	360.5	393.5	427.5	462.7
25	YTRSPS	I			33.7	38.4	43.6	48.7	54.1	60.0	66.1	72.3	78.6	85.0	91.5
26															
27	YXCSITS	I			168.0	188.7	202.9	223.9	249.4	276.4	304.3	335.0	365.8	397.3	430.1
28															
29	YXPTES	I			94.5	111.5	124.8	137.7	153.4	170.0	187.2	206.0	225.0	244.4	264.5
30	YXCSITS	I			69.4	77.2	78.1	86.2	96.0	106.4	117.2	129.0	140.8	153.0	165.6
31															
32	YXCPs	I			255.2	279.5	299.6	333.8	369.3	408.4	449.8	493.7	537.8	582.4	629.0
33															
34	YXPS	I			1450.1	1601.5	1761.2	1954.8	2169.0	2389.2	2611.8	2857.3	3094.9	3331.0	3566.0
35															
36	YXDOUS	I			1371.3	1504.9	1642.7	1821.1	2011.6	2213.6	2419.8	2644.2	2861.6	3080.8	3297.0
37															
38	YXCS	I			1336.5	1465.4	1599.3	1774.7	1962.2	2161.2	2364.4	2585.8	2800.2	3016.4	3229.6
39	YXINTCS	E			33.7	38.3	42.3	45.3	48.3	51.3	54.3	57.3	60.3	63.3	66.3
40	YXTRFS	E			1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
41															
42	YXPSAVS	I			78.8	96.7	118.5	133.7	157.4	175.6	192.0	213.1	233.4	250.2	269.0
43															
44	YXPSAVR	B			5.4	6.0	6.7	6.8	7.3	7.4	7.4	7.5	7.5	7.5	7.5
45															
46															
47															
48	YXPD	I			948.4	995.5	1028.0	1067.9	1111.1	1149.8	1185.2	1228.3	1266.9	1304.5	1341.1

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
DETERMINED PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

LINE VAR LABEL	UNIT	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 SVGS	GROSS PRIVATE SAVINGS	320.51	352.6	380.9	455.0	538.6	611.7	670.2	767.6	842.1	910.7	975.4
2 YPOSASVS	I PERSONAL SAVING	78.81	96.7	118.5	133.7	157.4	175.6	192.0	213.1	233.4	250.2	269.0
4 RETS	I UNDISTINGUISHED CORPORATE PROFITS	69.61	73.2	83.6	106.5	124.0	136.8	142.1	160.3	168.4	173.3	178.4
5 IVACS	B CORPORATE INVESTMENT VALUATION ADJ.	-23.01	-20.4	-19.5	-26.8	-31.1	-35.8	-38.3	-40.4	-39.6	-37.8	-36.4
6 CCACRPS	E CCA ADJUSTMENT, CORP. PROFITS	-18.11	-21.4	-24.1	-25.1	-26.1	-27.1	-28.1	-29.1	-30.1	-31.1	-32.1
7 CCATS	I CAPITAL CONSUMPTION ALLOWANCES	217.11	242.2	265.9	290.7	327.1	362.7	401.0	441.8	484.6	528.9	575.1
8 WALDS	E WAGE ACCRUALS LESS DISBURSEMENTS	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9												
10 GVSURPS	I GOVT SURPLUS OR DEFICIT (-)	-3.91	-17.6	-39.5	-27.6	-12.6	-0.6	5.6	21.9	25.5	27.2	21.4
11 GVSURPFS	I FEDERAL GOVT SURP OR DEF (-)	-31.01	-40.6	-63.3	-50.4	-41.5	-31.4	-27.1	-13.2	-9.9	-8.7	-17.2
12 GVSURPSS	I STATE & LOCAL SURP OR DEF (-)	27.11	22.9	23.7	26.8	28.9	30.8	32.6	35.1	35.4	35.8	38.6
13												
14 IFRSDRS	CAPITAL GRANTS REC'D. BY U. S., NET	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15												
16 IBGS	GROSS INVESTMENT	322.71	355.6	387.9	450.4	541.6	614.7	677.2	770.6	845.1	913.7	978.4
17 IBTS	I GROSS PRIVATE DOMESTIC INVESTMENT	345.71	362.0	388.8	467.4	557.6	631.1	695.9	787.8	852.8	917.0	977.6
18 IBBHFTS	NET FOREIGN INVESTMENT	-23.01	-6.4	-0.9	-9.1	-15.9	-16.4	-18.6	-17.2	-7.7	-3.3	0.8
19												
20 SOS	E STATISTICAL DISCREPANCY	2.21	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
21												
22												
23												
24												
25 VARI	RATIO PERSONAL SAVING TO	24.31	26.1	27.9	27.7	28.6	28.7	28.7	28.6	28.6	28.3	28.2
26	GROSS PRIVATE SAVING											
27												
28 VAR2	RATIO UNDISTINGUISHED CORP. PROFITS,	14.41	14.2	15.1	16.5	16.8	16.5	15.5	16.1	15.8	15.3	14.9
29	ADJUSTED FOR CORP. IVA,											
30	TO GROSS PRIVATE SAVING											
31												
32 VARI	RATIO CAP. CONS. ALLOW. TO	66.91	65.4	62.7	61.0	59.3	59.2	60.0	59.2	59.3	59.9	60.3
33												

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 HIGH-TECH PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 20.00 FINANCIAL SECTOR

LINE VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1 FM4S											
2 FM4S	976.2	1061.3	1152.3	1288.6	1443.7	1619.2	1801.0	1987.2	2174.2	2344.3	2510.6
3	10.8	6.7	8.6	11.8	12.0	12.2	11.2	10.3	9.4	7.8	7.1
4 FCUS											
5 FCUS	97.7	107.6	118.0	130.9	144.4	162.7	183.9	206.6	228.3	248.2	269.6
6	10.3	10.1	9.6	10.9	10.3	12.7	13.0	12.4	10.5	8.7	8.6
7 FDBDPS											
8 FDBDPS	265.9	279.6	301.6	335.8	364.0	404.5	460.4	522.5	578.6	630.3	662.3
9	7.0	5.2	7.9	11.3	8.4	11.1	13.8	13.5	10.7	8.9	5.1
10 FDBTS											
11 FDBTS	612.5	674.0	732.7	822.0	935.4	1052.0	1156.7	1258.1	1367.3	1465.8	1578.7
12	12.8	10.0	8.7	12.2	13.8	12.5	9.9	8.8	8.7	7.2	7.7
13 FREDET											
14 FREDET	0.0466	0.0464	0.0458	0.0457	0.0456	0.0455	0.0454	0.0453	0.0452	0.0451	0.0450
15 FRETS											
16 FRETS	41.0	48.3	47.4	53.0	59.3	66.3	73.5	80.7	88.0	94.6	100.9
17	40.2	47.3	47.3	52.8	59.0	66.3	73.7	80.9	87.8	94.4	101.0
18	-0.7	-0.0	-0.2	-0.2	-0.3	0.0	0.2	0.2	-0.2	-0.2	0.1
19 FRMDFB											
20 FRMDFB	7.43	9.54	8.63	8.88	8.43	8.07	7.56	6.78	6.48	6.57	6.42
21 FRMCS											
22 FRMCS	8.10	10.01	8.63	8.79	8.59	7.99	7.35	7.15	6.97	6.90	6.85
23 FRMCS											
24 FRMCS	9.08	9.79	9.64	9.77	10.01	9.50	9.26	8.95	8.64	8.37	8.29
25 FRMCS											
26 FRMCS	8.90	9.62	9.47	9.60	9.82	9.33	9.11	8.81	8.51	8.24	8.17
27 FRMCS											
28 FRMCS	8.74	9.45	9.30	9.44	9.68	9.15	8.92	8.60	8.28	8.00	7.92
29	9.22	9.97	9.81	9.95	10.20	9.66	9.42	9.09	8.77	8.48	8.40
30 FRMSE											
31 FRMSE	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
32	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
33 FSELS											
34 FSELS	9.68	10.46	10.30	10.39	10.52	10.16	9.96	9.76	9.56	9.39	9.33
35	0.58	0.20	0.60	0.59	0.76	0.80	0.96	0.92	0.87	0.79	0.78
36 FRMEDI											
37 FRMEDI	213.1	254.5	300.1	355.5	406.5	456.5	514.4	583.3	657.6	730.8	804.1
38	104.0	113.9	122.1	132.1	141.2	150.7	162.7	178.2	201.4	226.2	250.1
39											
40	8.59	10.72	9.04	9.42	9.47	9.12	8.72	8.42	8.22	8.12	8.02

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# MAFTEL ANNUAL AND INDUSTRY FORECASTING MODEL NICKER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 10.00 FEDERAL GOVERNMENT RECEIPTS AND EXPENDITURES (CURRENT \$)

LINE	VAR LABEL	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GVRF\$	429.8	467.1	491.6	550.0	614.9	684.3	752.8	833.6	908.0	983.2	1051.5		
2														
3	IXCPFS	172.1	209.0	222.0	245.8	269.9	300.8	333.6	369.2	402.9	438.5	473.2		
4	IXCCFS	71.5	69.4	68.6	65.7	100.8	112.3	120.3	135.3	145.6	154.3	162.9		
5	IXCRFS	27.8	29.0	29.9	29.5	33.1	36.7	40.2	44.2	47.8	51.3	54.9		
6	IXCRFESS	3.1	3.2	3.4	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.4		
7	IXCRFESS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8	IXCRFESS	24.7	25.7	26.5	26.0	29.6	33.3	36.7	40.8	44.4	47.9	51.5		
9	IXCSFIS	138.4	159.8	171.1	189.0	211.1	234.5	258.5	285.1	311.7	339.0	367.5		
10	IXCSFIS	108.8	126.4	133.9	146.6	162.9	180.1	197.7	217.1	236.5	256.4	277.2		
11	IXCSFT-\$S	29.6	33.3	37.2	42.4	48.2	54.4	60.8	68.0	75.2	82.6	90.2		
12														
13	GVFEFS	480.9	507.7	554.9	604.4	656.4	715.7	779.8	847.0	917.9	991.9	1068.6		
14														
15	GVFPFS	153.3	167.8	181.0	198.0	216.3	235.6	256.0	277.1	298.3	320.0	342.1		
16	GVFPFS	99.6	106.5	115.3	125.6	136.5	147.9	159.8	172.1	184.4	196.7	209.2		
17	GVFPFS	53.7	61.3	65.7	72.5	79.8	87.7	96.1	104.9	113.9	123.3	132.9		
18	TRGFS	185.9	208.4	235.2	257.0	281.8	309.8	340.7	373.0	407.5	443.7	480.5		
19	TRGFS	182.3	204.3	230.6	252.2	276.8	304.6	335.3	367.4	401.6	437.7	474.4		
20	TRGFS	9.2	9.8	10.7	9.0	7.2	6.4	6.7	6.9	8.3	10.2	11.7		
21	TRGFS	4.6	4.1	4.0	4.3	4.7	5.1	5.5	5.9	6.3	6.7	7.1		
22	TRGFS	26.2	29.3	32.6	36.2	40.0	44.1	48.4	52.9	57.4	62.2	67.0		
23	TRGFS	26.0	31.1	37.4	43.0	49.0	55.6	62.8	70.6	78.8	87.6	97.0		
24	TRGFS	91.8	104.5	119.6	130.9	144.5	159.2	174.8	191.0	207.5	224.5	242.0		
25	TRGFS	24.6	25.6	26.4	28.7	31.4	34.3	37.2	40.3	43.4	46.5	49.6		
26	TRGFS	3.5	4.1	4.5	4.7	4.9	5.1	5.3	5.5	5.8	6.0	6.2		
27	GVGFS	76.3	80.7	84.4	91.7	99.2	110.0	122.0	135.3	150.1	166.4	184.5		
28	GVGFS	35.5	41.3	44.8	47.0	48.5	49.6	50.5	51.0	51.4	51.1	50.8		
29	GVGFS	9.9	9.5	9.5	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7		
30	GVGFS	-31.0	-40.6	-63.3	-58.4	-41.5	-31.4	-27.1	-13.2	-9.9	-8.7	-17.2		
31														
32														
33	IXCPFS/VPFS	11.27	11.11	10.77	10.74	10.63	10.75	10.90	11.02	11.09	11.21	11.28		
34	IXCCFS/CPHIS	35.30	32.69	29.77	30.34	30.74	30.76	30.78	30.80	30.81	30.82	30.83		
35	IXCRFS/YNIS	1.63	1.55	1.47	1.29	1.30	1.30	1.30	1.30	1.30	1.29	1.12		
36	IXCRFESS/CENG	6.12	5.74	5.39	5.01	4.66	4.36	4.09	3.86	3.66	3.48	3.32		
37	IXCRFESS/YNIS	1.45	1.38	1.31	1.14	1.16	1.16	1.19	1.20	1.20	1.21	1.04		
38	IXCSFTS/MBIS	10.65	11.14	10.94	10.90	10.99	11.07	11.15	11.24	11.32	11.42	11.51		

A PRODUCT OF WHARTON EFA, INC., 3624 MARVET ST., PHILA., PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

WHARTON CARDINAL AND INDUSTRY FORECASTING MODEL  
 UTILITY PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 11.00 STATE AND LOCAL RECEIPTS AND EXPENDITURES (CURRENT \$)

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	1 / RECEIPTS	327.21	352.9	381.0	421.0	465.6	514.4	565.9	620.5	674.6	729.5	789.3
2	1 GROSS	63.11	70.5	77.6	87.9	99.5	107.6	116.0	124.6	134.9	143.8	155.9
3	1 PCPS	12.21	13.5	15.1	19.1	23.1	26.9	30.0	35.4	39.7	43.9	47.5
4	1 CCSS	150.11	159.3	172.1	187.4	205.5	227.9	252.1	275.3	295.9	317.0	338.8
5	1 CRSS	6.61	7.1	7.6	7.9	8.2	8.3	8.4	8.5	8.7	8.8	8.9
6	1 CRSSGAS	103.41	152.1	164.5	179.5	197.4	219.6	243.6	266.8	287.2	308.3	329.9
7	1 CRSSGAS	25.61	28.9	31.7	34.9	38.3	42.0	45.8	49.9	54.1	58.3	62.6
8	1 CRSSGAS	76.31	80.7	84.4	91.7	99.2	110.0	122.0	135.3	150.1	166.4	184.5
9	1 CRSSGAS	300.11	330.0	357.3	394.2	436.7	483.5	533.2	585.4	639.2	693.6	750.7
10	1 EXPENDITURES	280.11	306.9	330.3	362.2	399.2	440.2	483.8	529.8	577.3	625.3	675.9
11	1 PURCHASES OF GOODS AND SERVICES	115.61	126.6	134.8	146.2	159.4	173.9	189.0	204.5	220.3	235.7	251.7
12	1 EDUCATION	64.71	70.9	77.2	86.7	97.9	110.6	124.5	139.6	155.8	172.7	191.0
13	1 HEALTH AND WELFARE	22.01	24.2	25.9	28.7	31.9	35.6	39.5	43.6	48.0	52.4	57.1
14	1 SAFETY	77.71	85.2	92.5	100.6	109.9	120.1	130.9	142.0	153.3	164.5	176.1
15	1 OTHER	33.71	38.4	43.6	48.7	54.1	60.0	66.1	72.3	78.6	85.0	91.5
16	1 TRANSFER PAYMENTS	-7.71	-9.3	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7	-10.7
17	1 TRCS	-5.91	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0
18	1 NET INTEREST PAID	27.11	22.9	23.7	26.8	28.9	30.8	32.6	35.1	35.4	35.8	36.6
19	1 LESS CURR SURP OF GOVT ENTER											
20	1 SURPLUS OR DEFICIT (-)											
21	1 GROSS	3.701	3.75	3.77	3.84	3.92	3.85	3.79	3.72	3.71	3.67	3.72
22	1 PCPS	6.011	6.39	6.55	6.77	7.05	7.36	7.68	8.05	8.41	8.77	9.08
23	1 CCSS	8.821	8.54	8.48	8.21	8.05	8.07	8.17	8.10	8.02	7.98	7.95
24	1 CRSS	13.171	12.62	12.14	11.89	10.90	10.38	9.93	9.56	9.24	8.97	8.72
25	1 CRSSGAS	8.431	8.15	8.11	7.87	7.73	7.78	7.90	7.85	7.79	7.76	7.75
26	1 CRSSGAS	1.971	2.01	2.03	2.01	1.99	1.98	1.97	1.97	1.96	1.96	1.96
27	1 CRSSGAS											
28	1 CRSSGAS											
29	1 CRSSGAS											
30	1 CRSSGAS											

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.



ESTIMATING ANNUAL AND INDUSTRY FORECASTING MODEL  
 LABOR PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 37.00 PERSONAL AND INDIRECT TAX RATES

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
STATE TAXES (EFFECTIVE RATES)												
1												
2												
3	TXRPTNFI	4.071	4.14	4.19	4.27	4.35	4.26	4.20	4.12	4.12	4.08	4.13
4	TXRPTNFI	2.121	2.18	2.21	2.18	2.16	2.15	2.15	2.14	2.14	2.14	2.14
5	TXRPTNFI	6.011	6.19	6.55	6.77	7.05	7.36	7.68	8.05	8.41	8.77	8.98
6	TXRPTNFI	8.821	8.54	8.48	8.21	8.05	8.07	8.17	8.10	8.02	7.98	7.95
7												
8												
FEDERAL TAXES												
9												
10	TXRPTNFI	12.941	12.80	12.52	12.47	12.33	12.45	12.62	12.74	12.83	12.97	13.07
11												
12	TXRPTNFI	14.001	14.39	14.16	14.16	14.16	14.16	14.16	14.16	14.16	14.16	14.16
13	TXRPTNFI	15.001	15.24	15.35	15.35	15.35	15.35	15.35	15.35	15.35	15.35	15.35
14	TXRPTNFI	16.001	16.28	16.28	16.28	16.28	16.28	16.28	16.28	16.28	16.28	16.28
15	TXRPTNFI	17.001	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74
16	TXRPTNFI	19.001	19.11	19.11	19.11	19.11	19.11	19.11	19.11	19.11	19.11	19.11
17	TXRPTNFI	22.001	22.03	22.03	22.03	22.03	22.03	22.03	22.03	22.03	22.03	22.03
18	TXRPTNFI	25.001	25.80	25.80	25.80	25.80	25.80	25.80	25.80	25.80	25.80	25.80
19	TXRPTNFI	28.001	28.46	28.46	28.46	28.46	28.46	28.46	28.46	28.46	28.46	28.46
20	TXRPTNFI	32.001	32.13	32.13	32.13	32.13	32.13	32.13	32.13	32.13	32.13	32.13
21												
22												
INCOME PROP. BY TAX BRACKET												
23												
24	TXRPTNFI	0.042610	0.0319	0.0289	0.0277	0.0268	0.0258	0.0244	0.0215	0.0192	0.0170	0.0153
25	TXRPTNFI	0.045710	0.0350	0.0319	0.0304	0.0293	0.0281	0.0266	0.0235	0.0209	0.0186	0.0167
26	TXRPTNFI	0.066210	0.0513	0.0453	0.0424	0.0400	0.0377	0.0349	0.0302	0.0261	0.0223	0.0191
27	TXRPTNFI	0.058410	0.0554	0.0520	0.0490	0.0465	0.0442	0.0414	0.0365	0.0322	0.0284	0.0252
28	TXRPTNFI	0.100710	0.0822	0.0767	0.0743	0.0719	0.0696	0.0663	0.0568	0.0514	0.0467	0.0422
29	TXRPTNFI	0.205610	0.2245	0.2291	0.2293	0.2286	0.2286	0.2301	0.2340	0.2368	0.2393	0.2424
30	TXRPTNFI	0.120610	0.1467	0.1553	0.1602	0.1625	0.1636	0.1663	0.1777	0.1864	0.1938	0.2002
31	TXRPTNFI	0.160210	0.1730	0.1808	0.1928	0.1995	0.2061	0.2122	0.2194	0.2271	0.2340	0.2388
32												
EXEMPTIONS & DEDUCTIONS (MILLION CURRENT \$)												
33												
34												
35												
36	TXRPTNFI	90.521	93.13	96.33	99.40	102.26	104.64	106.51	108.47	110.10	111.68	113.21
37	TXRPTNFI	230.661	232.56	235.24	238.43	241.44	243.97	245.95	248.12	249.94	251.68	253.37
38	TXRPTNFI	0.7501	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
39	TXRPTNFI	58.221	59.08	60.25	61.30	61.93	62.70	61.96	61.95	61.92	61.76	61.51
40	TXRPTNFI	32.301	34.05	36.07	38.10	40.33	42.44	44.55	46.52	48.28	49.92	51.70
41	TXRPTNFI	2.5301	2.689	2.879	3.007	3.224	3.405	3.578	3.750	3.922	4.094	4.266
42	TXRPTNFI	6.2201	6.127	6.222	6.941	7.733	8.573	9.439	10.411	11.360	12.294	13.194
43	TXRPTNFI	147.31	158.9	172.9	186.7	199.6	211.8	221.7	232.1	242.4	252.8	262.4
44	TXRPTNFI	203.11	208.6	224.4	248.5	311.9	363.8	420.5	484.3	548.5	613.7	682.2
45	TXRPTNFI	350.41	367.5	397.4	451.2	511.5	575.6	642.1	716.6	790.9	866.5	944.5
46	TXRPTNFI	0.643110	0.6304	0.6255	0.6167	0.6056	0.5948	0.5817	0.5712	0.5615	0.5530	0.5433

A PRODUCT OF CHARTER FEA, INC., 3624 MARKET ST., PHILA., PA 19104. WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 37.00 PERSONAL AND INDIRECT TAX RATES

LINE	VAR LABEL	I T F M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	VTAX35	I	TAXABLE INCOME (MJA BASIS)---										
2			1024.611103.7	1219.1	1370.4	1535.9	1704.4	1873.1	2050.6	2234.6	2406.6	2577.4	
3	TAXRTEF	I	INDIRECT TAXES-----										
4			1.631	1.55	1.47	1.29	1.30	1.30	1.30	1.30	1.30	1.29	1.12
5			SOCIAL INSURANCE-----										
6			11.491	12.08	11.89	11.84	11.94	12.03	12.13	12.23	12.33	12.44	12.55
7	TAXRTEF	I	EFFECTIVE TAX RATE-----										
8	TAXRTEF	E	12.101	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26
9	TAXRTEF	E	0.901	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
10	TAXRTEF	E	17.701	22.90	22.90	22.90	24.50	26.22	28.05	30.02	32.12	34.37	36.77
11			RATIOS (X1)-----										
12	TAXRTEF/TXCSITS	E	42.341	40.91	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50
13	RAWLSC	E	85.351	89.00	89.88	88.40	88.27	88.15	88.09	88.04	88.11	88.28	88.51
14	RAWLSC	E	92.001	92.00	92.00	92.00	92.00	92.00	92.00	92.00	92.00	92.00	92.00
15			NON-RESIDENT CONTRIBUTION TO SI /										
16	RATXCSFT-9	E	2.001	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50

A PRODUCT OF WHARTON EFA, INC., 3624 MARKET ST, PHILA, PA 19104 WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

STATION ANNUAL AND INDUSTRY FORECASTING MODEL  
 HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 45.10 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	CCAACPS	-18.12	-21.43	-24.11	-25.11	-26.11	-27.11	-28.11	-29.11	-30.11	-31.11	-32.11
2	CCAAYENTB	0.35	0.45	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
3	CCAAYENTB	-5.23	-5.76	-6.56	-7.36	-8.16	-8.96	-9.76	-10.56	-11.36	-12.16	-12.96
4	CCAAYENTB	-20.94	-23.08	-25.08	-27.08	-29.08	-31.08	-33.08	-35.08	-37.08	-39.08	-41.08
5	CCARNIAG	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
6	CCARNIAG	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
7	CCARNIAGD20	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
8	CCARNIAGD25	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
9	CCARNIAGD32	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
10	CCARNIAGD33	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
11	CCARNIAGD34	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
12	CCARNIAGD35	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
13	CCARNIAGD36	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
14	CCARNIAGD379P2	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
15	CCARNIAGD371	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
16	CCARNIAGD38	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
17	CCARNIAGD20	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
18	CCARNIAGD21	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
19	CCARNIAGD22	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
20	CCARNIAGD23	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
21	CCARNIAGD26	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
22	CCARNIAGD27	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
23	CCARNIAGD28	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
24	CCARNIAGD29	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
25	CCARNIAGD30	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
26	CCARNIAGD31	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
27	CCARNIAG	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
28	CCARNIAGC48	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
29	CCARNIAGC49	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
30	CCARNIAGC49	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
31	CCARRH	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500
32	CCARRH	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061	1.061
33	CCARRH	0.863	0.863	0.863	0.863	0.863	0.863	0.863	0.863	0.863	0.863	0.863
34	CCARRH	23.18	25.85	28.86	28.96	29.06	29.16	29.26	29.36	29.46	29.56	29.66
35	CENCG3/P	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09
36	CFNFG3/P	3.40	3.30	3.30	3.30	3.37	3.43	3.50	3.57	3.64	3.72	3.79
37	CFNFG3/P	15.60	15.00	16.10	16.10	16.30	16.50	16.70	16.90	17.10	17.30	17.50
38	DIMAUTICA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
39	DIMAUTICA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	DIMAUTICA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	DIMCCA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
42	DIMDICK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	DIME XPI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	DIME XPI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	DIME XPI	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
46	DIME XPI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	DIME XPI	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
48	DIME XPI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	DIME XPI	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
50	DIME XPI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	DIME XPI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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# CHARTER AIRLINES AND INDUSTRY FORECASTING MODEL HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 45.10 EXTERIOR ASSUMPTIONS

LINE	VAR LABEL	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	DIMPXMF22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	DIMPXMF26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	DIMPXMF25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	DIMPXMF25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	DIMPXMF25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	DIMPXMF26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	DIMPXMF26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	DIMPXMF30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	DIMPXMF30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	DIMPXMF46	74.00	79.00	80.00	81.00	82.00	83.00	84.00	85.00	86.00	87.00	88.00	89.00	90.00	91.00	92.00
11	DIMPXMF46	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
12	DIMPXMF46	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
13	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
44	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	DIMPXMF46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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QUARTERLY ANNUAL AND INDUSTRY FORECASTING MODEL  
HIGHER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 45.10 EXGENOUS ASSUMPTIONS

LINE	VAR LABEL	1970	1971	1972	1973	1974	1975	1976	1977	1978
1	ITRACM	5.29	6.87	6.87	6.87	6.87	6.87	6.87	6.87	6.87
2	ITRACFD24	8.46	10.99	10.99	10.99	10.99	10.99	10.99	10.99	10.99
3	ITRACFD25	6.55	8.52	8.52	8.52	8.52	8.52	8.52	8.52	8.52
4	ITRACFD32	8.14	10.58	10.58	10.58	10.58	10.58	10.58	10.58	10.58
5	ITRACFD33	8.56	11.12	11.12	11.12	11.12	11.12	11.12	11.12	11.12
6	ITRACFD34	7.88	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25
7	ITRACFD35	6.31	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20
8	ITRACFD36	7.93	10.31	10.31	10.31	10.31	10.31	10.31	10.31	10.31
9	ITRACFD37SP2	7.31	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50
10	ITRACFD37I	8.97	11.66	11.66	11.66	11.66	11.66	11.66	11.66	11.66
11	ITRACFD38	7.57	9.84	9.84	9.84	9.84	9.84	9.84	9.84	9.84
12	ITRACFD39	7.74	10.07	10.07	10.07	10.07	10.07	10.07	10.07	10.07
13	ITRACFD40	8.41	10.93	10.93	10.93	10.93	10.93	10.93	10.93	10.93
14	ITRACFD41	8.38	10.89	10.89	10.89	10.89	10.89	10.89	10.89	10.89
15	ITRACFD42	7.02	9.12	9.12	9.12	9.12	9.12	9.12	9.12	9.12
16	ITRACFD43	9.10	11.83	11.83	11.83	11.83	11.83	11.83	11.83	11.83
17	ITRACFD44	7.89	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26
18	ITRACFD45	8.69	11.29	11.29	11.29	11.29	11.29	11.29	11.29	11.29
19	ITRACFD46	6.31	8.20	8.20	8.20	8.20	8.20	8.20	8.20	8.20
20	ITRACFD47	8.16	10.61	10.61	10.61	10.61	10.61	10.61	10.61	10.61
21	ITRACFD48	5.18	6.74	6.74	6.74	6.74	6.74	6.74	6.74	6.74
22	ITRACFD49	6.19	8.05	8.05	8.05	8.05	8.05	8.05	8.05	8.05
23	ITRACFD50	5.02	6.53	6.53	6.53	6.53	6.53	6.53	6.53	6.53
24	ITRACFD51	6.30	8.19	8.19	8.19	8.19	8.19	8.19	8.19	8.19
25	ITRACFD52	5.58	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25
26	ITRACFD53	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05	14.05
27	ITRACFD54	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17
28	ITRACFD55	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61
29	ITRACFD56	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81
30	ITRACFD57	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26
31	ITRACFD58	17.60	17.60	17.60	17.60	17.60	17.60	17.60	17.60	17.60
32	ITRACFD59	16.40	16.40	16.40	16.40	16.40	16.40	16.40	16.40	16.40
33	ITRACFD60	16.86	16.86	16.86	16.86	16.86	16.86	16.86	16.86	16.86
34	ITRACFD61	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30	15.30
35	ITRACFD62	16.46	16.46	16.46	16.46	16.46	16.46	16.46	16.46	16.46
36	ITRACFD63	11.64	11.64	11.64	11.64	11.64	11.64	11.64	11.64	11.64
37	ITRACFD64	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60	16.60
38	ITRACFD65	17.04	17.04	17.04	17.04	17.04	17.04	17.04	17.04	17.04
39	ITRACFD66	16.97	16.97	16.97	16.97	16.97	16.97	16.97	16.97	16.97
40	ITRACFD67	15.37	15.37	15.37	15.37	15.37	15.37	15.37	15.37	15.37
41	ITRACFD68	16.29	16.29	16.29	16.29	16.29	16.29	16.29	16.29	16.29
42	ITRACFD69	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73	15.73
43	ITRACFD70	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50	14.50
44	ITRACFD71	13.37	13.37	13.37	13.37	13.37	13.37	13.37	13.37	13.37
45	ITRACFD72	20.63	20.63	20.63	20.63	20.63	20.63	20.63	20.63	20.63
46	ITRACFD73	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30	16.30
47	ITRACFD74	18.44	18.44	18.44	18.44	18.44	18.44	18.44	18.44	18.44
48	ITRACFD75	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17	21.17
49	ITRACFD76	23.75	23.75	23.75	23.75	23.75	23.75	23.75	23.75	23.75
50	ITRACFD77	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11
51	ITRACFD78	33.90	33.90	33.90	33.90	33.90	33.90	33.90	33.90	33.90

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MACTEC ACTUAL AND INDUSTRY FORECASTING MODEL  
SECOND PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 45.10 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1974	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	MPRC	11.290	12.010	12.700	14.160	15.420	16.685	17.319	17.682	17.859	18.038	18.218
2	MPRI	20.950	22.220	23.780	25.920	28.985	30.149	31.114	31.518	31.754	31.993	32.232
3	MPR	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350
4	MPF	58.26	59.27	60.26	61.27	62.31	63.32	64.29	65.20	66.10	66.97	67.82
5	MPH	75.94	77.50	79.06	80.65	82.24	83.82	85.36	86.86	88.31	89.74	91.14
6	MPH	21.57	22.12	22.68	23.24	23.78	24.32	24.86	25.40	25.90	26.40	26.88
7	MPHSE	6274.66	6435.08	6697.09	6807.00	6917.00	7006.00	7088.00	7169.00	7249.00	7321.00	7482.00
8	MPHSE	478.17	470.00	470.00	470.00	470.00	470.00	470.00	470.00	470.00	470.00	470.00
9	MPHSE-EI	-1388.51	-1500.28	-1500.04	-1476.00	-1452.00	-1450.00	-1467.00	-1486.50	-1496.00	-1490.00	-1475.00
10	MPH	2.12	2.09	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07	2.07
11	MPH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	MPR	1836.89991853	18991874	19001916	196011944	20001944	20001962	20001978	20001994	20002007	20002021	20002034
13	MPR15.19	55.2000	55.4000	55.5000	55.8000	55.5000	54.7000	53.8000	52.8000	52.1400	51.4800	50.8200
14	MPR20.24	118.3000	121.3000	124.2000	128.2000	131.2000	133.5000	135.5000	137.4000	138.3200	139.2400	140.1600
15	MPR16.17	4.13	4.06	3.99	3.89	3.70	3.55	3.46	3.44	3.50	3.58	3.47
16	MPR18.19	4.21	4.23	4.22	4.15	4.09	3.97	3.79	3.63	3.54	3.52	3.58
17	MPR20.24	10.16	10.30	10.39	10.49	10.47	10.42	10.34	10.18	9.89	9.60	9.29
18	MPR25.29	9.06	9.25	9.49	9.69	9.92	10.10	10.24	10.33	10.42	10.41	10.35
19	MPR30.34	8.01	8.35	8.69	9.14	9.11	9.27	9.47	9.70	9.91	10.14	10.32
20	MPR35.39	6.67	6.94	7.17	7.29	7.66	8.10	8.44	8.79	9.24	9.21	9.36
21	MPR40.44	5.80	5.90	6.00	6.14	6.36	6.72	6.99	7.22	7.34	7.91	8.15
22	MPR45.49	5.82	5.78	5.65	5.64	5.67	5.73	5.83	5.92	6.07	6.28	6.64
23	MPR50.54	6.13	6.06	6.02	5.94	5.86	5.79	5.71	5.62	5.61	5.64	5.70
24	MPR55.59	5.87	5.93	5.94	5.95	5.90	5.86	5.80	5.76	5.69	5.61	5.53
25	MPR60.64	5.01	5.09	5.21	5.32	5.46	5.56	5.62	5.63	5.59	5.55	5.58
26	MPR65.69	4.77	4.82	4.84	4.88	4.90	4.94	5.02	5.14	5.25	5.38	5.48
27	MPR70.74	3.67	3.80	3.94	4.03	4.10	4.16	4.20	4.22	4.26	4.28	4.31
28	MPR75.79	3.80	3.94	4.16	4.34	4.40	4.58	4.67	4.77	4.84	4.91	5.00
29	MPR80.84	4.29	4.42	4.64	4.84	4.90	5.04	5.14	5.25	5.38	5.61	5.70
30	MPR85.89	4.30	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32
31	MPR90.94	10.20	10.43	10.51	10.61	10.60	10.54	10.47	10.31	10.02	9.71	9.40
32	MPR95.99	9.98	9.18	9.43	9.62	9.85	10.02	10.15	10.24	10.33	10.31	10.26
33	MPR100.04	7.80	6.21	6.87	7.00	7.57	7.81	8.14	8.49	8.92	8.89	9.04
34	MPR105.09	5.52	5.81	5.69	5.84	6.05	6.41	6.67	6.89	7.02	7.58	7.83
35	MPR110.14	5.54	5.47	5.34	5.36	5.38	5.43	5.52	5.60	5.75	5.95	6.31
36	MPR115.19	5.70	5.66	5.64	5.60	5.54	5.47	5.39	5.31	5.29	5.31	5.36
37	MPR120.24	5.17	5.43	5.85	5.46	5.42	5.40	5.37	5.35	5.31	5.25	5.18
38	MPR125.29	4.41	4.48	4.58	4.68	4.82	4.91	4.97	4.99	4.99	4.96	4.95
39	MPR130.34	3.79	3.84	3.87	3.90	3.92	3.95	4.01	4.11	4.21	4.33	4.41
40	MPR135.39	2.68	2.76	2.86	2.91	2.97	3.01	3.06	3.08	3.11	3.13	3.15
41	MPR140.44	1.28	1.34	1.41	1.48	1.56	1.65	1.74	1.85	1.93	2.02	2.10
42	MPR145.49	1.20	1.30	1.40	1.40	1.40	1.39	1.38	1.37	1.36	1.35	1.34
43	MPR150.54	1.20	1.30	1.40	1.40	1.40	1.39	1.38	1.37	1.36	1.35	1.34
44	MPR155.59	1.20	1.30	1.40	1.40	1.40	1.39	1.38	1.37	1.36	1.35	1.34
45	MPR160.64	1.20	1.30	1.40	1.40	1.40	1.39	1.38	1.37	1.36	1.35	1.34
46	MPR165.69	1.20	1.30	1.40	1.40	1.40	1.39	1.38	1.37	1.36	1.35	1.34
47	MPR170.74	1.20	1.30	1.40	1.40	1.40	1.39	1.38	1.37	1.36	1.35	1.34
48	MPR175.79	1.20	1.30	1.40	1.40	1.40	1.39	1.38	1.37	1.36	1.35	1.34
49	MPR180.84	1.20	1.30	1.40	1.40	1.40	1.39	1.38	1.37	1.36	1.35	1.34
50	MPR185.89	1.20	1.30	1.40	1.40	1.40	1.39	1.38	1.37	1.36	1.35	1.34
51	MPR190.94	1.20	1.30	1.40	1.40	1.40	1.39	1.38	1.37	1.36	1.35	1.34

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WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
LOWER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 45.10 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	PTIMA	225.67	242.53	253.52	274.25	297.30	316.30	336.58	358.22	380.61	404.10	428.31
2	PTINSE	140.40	151.86	160.54	165.94	171.73	175.77	179.90	184.12	188.45	192.88	197.41
3	PTIEGIC	393.04	418.96	445.19	477.71	511.01	542.90	578.06	615.66	651.49	686.50	727.02
4	PTIEGIC	200.13	203.36	209.54	214.96	220.87	226.88	232.56	238.26	243.96	249.66	255.36
5	PTIEGIC	148.10	155.50	165.83	174.51	193.24	206.88	220.56	235.26	249.96	264.66	280.00
6	PTIEGIC	196.23	215.12	220.83	241.03	258.26	273.11	288.33	304.43	321.17	338.25	356.23
7	PTIEGIC	270.70	301.69	338.70	372.57	402.38	426.52	449.98	474.27	499.41	525.16	552.17
8	PTIEGIC	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
9	PTIEGIC	8.60	8.60	8.60	8.60	8.60	8.60	8.60	8.60	8.60	8.60	8.60
10	PTIEGIC	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99
11	PTIEGIC	53.45	56.33	59.50	62.77	66.22	69.87	73.71	77.76	82.04	86.55	91.31
12	PTIEGIC	14.55	15.71	16.65	17.73	18.80	19.83	20.82	21.86	22.96	24.10	25.31
13	PTIEGIC	10.60	11.24	11.85	12.47	13.12	13.81	14.54	15.30	16.11	16.96	17.85
14	PTIEGIC	277.10	306.20	330.70	354.30	377.90	401.50	425.10	448.70	472.30	495.90	520.69
15	PTIEGIC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	PTIEGIC	0.634	0.647	0.632	0.620	0.618	0.616	0.614	0.612	0.610	0.608	0.606
17	PTIEGIC	0.328	0.336	0.342	0.346	0.348	0.350	0.352	0.354	0.356	0.358	0.360
18	PTIEGIC	2.000	2.050	2.100	2.150	2.200	2.250	2.300	2.350	2.400	2.450	2.500
19	PTIEGIC	92.000	92.000	92.000	92.000	92.000	92.000	92.000	92.000	92.000	92.000	92.000
20	PTIEGIC	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
21	PTIEGIC	87.75	86.63	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00
22	PTIEGIC	22.14	21.25	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
23	PTIEGIC	49.84	51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00	51.00
24	PTIEGIC	0.1175	0.1152	0.1135	0.1135	0.1135	0.1135	0.1135	0.1135	0.1135	0.1135	0.1135
25	PTIEGIC	0.4809	0.5050	0.5100	0.5100	0.5100	0.5100	0.5100	0.5100	0.5100	0.5100	0.5100
26	PTIEGIC	4.392	4.100	4.000	3.490	3.490	3.490	3.490	3.490	3.490	3.490	3.490
27	PTIEGIC	191.34	187.00	185.00	185.54	185.54	185.54	186.09	186.09	186.09	186.09	186.09
28	PTIEGIC	2.17	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

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HARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 LONG-TERM PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1974

TABLE 45.20 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TEHAT	-1.16	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
2	TEHES	-0.57	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40
3	TEHES	8.20	9.93	10.20	10.20	10.50	10.80	11.10	11.40	11.70	12.00	12.30
4	TEHISERS	0.78	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
5	TEHISERS	0.07	10.60	11.40	12.82	14.40	16.17	18.16	20.34	22.41	24.46	26.70
6	TECGNPL4803	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
7	TECGN3	1.40	1.45	1.28	1.29	1.29	1.39	1.49	1.59	1.69	1.79	1.89
8	TEHGT2203	5.40	6.62	7.13	7.52	7.92	9.72	9.22	10.52	11.82	13.13	14.43
9	TEHGT35	14.44	17.22	19.32	20.92	22.68	24.61	26.74	29.07	31.40	33.73	36.06
10	TEHAT	-5.25	-5.10	-5.10	-5.10	-5.10	-5.10	-5.10	-5.10	-5.10	-5.10	-5.10
11	TEHAT	136.36	143.26	149.71	156.69	167.90	177.64	187.94	198.84	210.37	222.57	235.48
12	TEHAT	-0.43	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90	-0.90
13	TEHES	-3.39	-3.85	-3.85	-3.85	-3.85	-3.85	-3.85	-3.85	-3.85	-3.85	-3.85
14	TEHES	6.57	7.16	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88
15	TEHISERS	2.17	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60	2.60
16	TEHISERS	4.66	5.23	5.83	6.40	6.97	7.60	8.28	9.03	9.84	10.73	11.69
17	TEHGT301	302.00	310.00	325.00	331.50	338.13	344.89	351.79	358.82	366.00	373.32	380.79
18	TEHGT32	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70
19	TEHGT331	2204.70	2455.00	2600.00	2899.41	3131.41	3350.64	3568.46	3768.32	3968.06	4166.48	4366.49
20	TEHGT3324	511.00	531.00	550.00	580.24	609.95	639.62	669.44	699.83	729.83	759.82	789.81
21	TEHGT34	1000.00	1050.00	1400.00	1800.00	1800.00	1800.00	1800.00	1800.00	1800.00	1800.00	1800.00
22	TEHGT35/CEDAS	0.1179	0.1235	0.1215	0.1215	0.1215	0.1215	0.1215	0.1215	0.1215	0.1215	0.1215
23	TEHGT35/CEDAS	0.1205	0.1191	0.1189	0.1169	0.1149	0.1129	0.1109	0.1089	0.1069	0.1049	0.1029
24	TEHAT	10.69	11.84	13.01	13.81	14.61	15.41	16.21	17.01	17.81	18.61	19.41
25	TEHGT35	3.55	4.07	4.55	4.75	4.95	5.15	5.35	5.55	5.75	5.95	6.15
26	TEHGT35	2.82	2.30	2.13	2.18	2.22	2.26	2.30	2.34	2.39	2.43	2.48
27	TEHGT35	17.40	18.20	19.00	19.80	20.49	21.21	21.95	22.72	23.52	24.34	25.19
28	TEHGT35	16.35	15.93	15.39	15.69	16.08	16.49	16.90	17.32	17.75	18.20	18.65
29	TEHGT35	16.54	18.37	20.60	21.83	22.92	24.07	25.27	26.53	27.86	29.25	30.71
30	TEHGT35	61.03	64.93	69.79	71.54	74.04	76.63	79.31	82.09	84.96	87.94	91.01
31	TEHGT35	22.39	23.87	25.46	26.59	27.72	28.85	29.98	31.08	32.18	33.28	34.41
32	TEHGT35	1.07	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
33	TEHGT35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	TEHGT35	42.34	40.91	39.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50	38.50
35	TEHGT35	2.53	2.69	2.87	3.05	3.22	3.40	3.58	3.75	3.92	4.09	4.27
36	TEHGT35	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
37	TEHGT35	17.70	22.90	22.90	22.90	24.50	26.22	28.05	30.02	32.12	34.37	36.77
38	TEHGT35	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030	0.9030
39	TEHGT35	13.26	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
40	TEHGT35	67.00	67.00	67.00	67.00	67.00	67.00	67.00	67.00	67.00	67.00	67.00
41	TEHGT35	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
42	TEHGT35	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
43	TEHGT35	34.58	33.14	30.78	30.94	30.94	30.94	30.94	30.94	30.94	30.94	30.94
44	TEHGT35	20.33	23.52	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80	21.80
45	TEHGT35	31.08	29.71	29.71	29.71	29.71	29.71	29.71	29.71	29.71	29.71	29.71
46	TEHGT35	31.94	30.61	29.62	29.62	29.62	29.62	29.62	29.62	29.62	29.62	29.62
47	TEHGT35	39.92	38.25	35.76	35.76	35.76	35.76	35.76	35.76	35.76	35.76	35.76
48	TEHGT35	30.12	37.00	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05	35.05
49	TEHGT35	40.18	38.50	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00
50	TEHGT35	40.60	38.00	36.37	36.37	36.37	36.37	36.37	36.37	36.37	36.37	36.37
51	TEHGT35	45.33	41.24	38.55	38.55	38.55	38.55	38.55	38.55	38.55	38.55	38.55

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CATERA ANNUAL AND INDUSTRY FORECASTING MODEL  
 MAJOR PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 45.20 EXOGENOUS ASSUMPTIONS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TXRTEFMD36	40.95	39.24	36.69	36.69	36.69	36.69	36.69	36.69	36.69	36.69	36.69
2	TXRTEFMD3SP2	39.47	37.82	35.36	35.36	35.36	35.36	35.36	35.36	35.36	35.36	35.36
3	TXRTEFMD371	43.34	41.57	38.87	38.87	38.87	38.87	38.87	38.87	38.87	38.87	38.87
4	TXRTEFMD38	45.04	41.24	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56	38.56
5	TXRTEFMD420	42.77	40.99	38.32	38.32	38.32	38.32	38.32	38.32	38.32	38.32	38.32
6	TXRTEFMD421	45.67	41.85	39.12	39.12	39.12	39.12	39.12	39.12	39.12	39.12	39.12
7	TXRTEFMD422	42.28	40.52	37.88	37.88	37.88	37.88	37.88	37.88	37.88	37.88	37.88
8	TXRTEFMD423	38.04	36.46	34.08	34.08	34.08	34.08	34.08	34.08	34.08	34.08	34.08
9	TXRTEFMD426	41.33	39.61	37.03	37.03	37.03	37.03	37.03	37.03	37.03	37.03	37.03
10	TXRTEFMD427	40.26	38.58	36.07	36.07	36.07	36.07	36.07	36.07	36.07	36.07	36.07
11	TXRTEFMD428	43.46	41.84	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11	39.11
12	TXRTEFMD429	33.31	31.92	29.85	29.85	29.85	29.85	29.85	29.85	29.85	29.85	29.85
13	TXRTEFMD430	40.81	39.11	36.57	36.57	36.57	36.57	36.57	36.57	36.57	36.57	36.57
14	TXRTEFMD431	39.93	38.27	35.78	35.78	35.78	35.78	35.78	35.78	35.78	35.78	35.78
15	TXRTEFMD433	44.43	42.54	39.81	39.81	39.81	39.81	39.81	39.81	39.81	39.81	39.81
16	TXRTEFMD438	44.39	42.54	39.77	39.77	39.77	39.77	39.77	39.77	39.77	39.77	39.77
17	TXRTEFMD439	34.94	33.44	31.30	31.30	31.30	31.30	31.30	31.30	31.30	31.30	31.30
18	TXRTEFMD449	43.61	41.79	39.07	39.07	39.07	39.07	39.07	39.07	39.07	39.07	39.07
19	TXRTEFMD450	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98	28.98
20	TXRTEFMD451	46.50	46.50	46.50	46.50	46.50	46.50	46.50	46.50	46.50	46.50	46.50
21	TXRTEFMD452	5.08	5.16	5.26	5.41	5.56	5.71	5.86	6.01	6.16	6.31	6.46
22	TXRTEFMD453	14.00	11.39	11.16	11.16	11.16	11.16	11.16	11.16	11.16	11.16	11.16
23	TXRTEFMD454	15.00	14.24	13.96	13.96	13.96	13.96	13.96	13.96	13.96	13.96	13.96
24	TXRTEFMD455	16.00	15.66	15.35	15.35	15.35	15.35	15.35	15.35	15.35	15.35	15.35
25	TXRTEFMD456	17.00	16.28	15.95	15.95	15.95	15.95	15.95	15.95	15.95	15.95	15.95
26	TXRTEFMD457	19.00	18.11	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74
27	TXRTEFMD458	22.00	20.43	20.42	20.42	20.42	20.42	20.42	20.42	20.42	20.42	20.42
28	TXRTEFMD459	25.00	23.33	23.33	23.33	23.33	23.33	23.33	23.33	23.33	23.33	23.33
29	TXRTEFMD460	28.00	27.46	26.92	26.92	26.92	26.92	26.92	26.92	26.92	26.92	26.92
30	TXRTEFMD461	32.00	31.13	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50	30.50
31	TXRSTHIF	12.10	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26
32	WALDGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	WALDGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	WALDGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	VENITFS	24.34	24.14	24.65	32.65	34.65	36.65	38.65	40.65	42.65	44.65	47.11
36	VENITFS	33.68	33.34	42.28	45.28	48.28	51.28	54.28	57.28	60.28	63.28	66.28
37	VENITFS	35.50	41.34	44.79	46.96	48.46	49.56	50.46	50.96	51.36	51.86	52.36
38	VENITGFFS	8.47	7.25	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77
39	VENITGSS	-7.75	-9.28	-10.68	-10.68	-10.68	-10.68	-10.68	-10.68	-10.68	-10.68	-10.68
40	ZCAP	121.09	126.43	132.72	137.90	143.28	148.86	154.67	160.70	166.97	173.48	180.24
41	ZCAPC	167.38	161.35	155.87	150.01	143.28	135.33	126.15	115.78	104.22	91.46	77.93
42	ZFKIP	112.21	117.21	125.12	130.12	135.33	140.74	146.37	152.23	158.32	164.65	171.23
43	ZFRPC	178.95	197.34	215.22	228.13	241.82	256.33	271.71	288.01	305.29	323.61	343.02
44	ZGEIP	111.64	117.30	122.68	128.81	135.25	142.01	149.11	156.57	164.40	172.62	181.25
45	ZGEP	135.45	139.16	143.02	147.38	151.67	156.33	161.33	166.70	172.44	178.57	185.10
46	ZIIP	110.17	122.00	138.07	154.47	171.19	188.25	205.67	223.45	241.62	260.20	279.21
47	ZIIPC	236.16	262.50	290.36	318.78	347.78	377.38	407.57	438.35	469.72	501.68	534.24
48	ZIAPC	120.65	127.49	135.55	143.69	152.31	161.45	171.13	181.40	192.29	203.83	216.06
49	ZIAPC	190.74	197.13	205.33	214.57	224.22	234.31	244.86	255.88	267.39	279.42	291.99
50	ZIIP	143.79	153.99	165.46	178.77	193.40	209.40	226.86	244.76	263.10	281.99	301.34
51	ZIIP	270.00	320.44	385.10	458.46	533.20	614.43	704.33	804.91	914.21	1033.21	1161.99
52	ZIIP	251.44	268.42	287.64	308.65	331.20	356.43	384.30	414.81	448.02	484.11	523.19
53	ZIIP	105.94	119.39	134.31	150.60	168.18	187.96	209.91	234.11	260.62	289.57	320.99
54	ZIAPC	255.51	270.55	287.89	306.17	326.45	349.41	375.55	404.91	437.60	473.72	513.30



SHORT-TERM APPROPRIATE AND INDUSTRY FORECASTING MODEL  
 CHARTER PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

TABLE 45.50 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	CCATAGS	0.07	-0.02	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
2	CCATF0245	-0.76	-0.01	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
3	CCATF0245	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
4	CCATF0253	0.00	-0.06	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
5	CCATF0325	0.11	0.15	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
6	CCATF0335	-0.00	-0.02	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
7	CCATF0343	0.00	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
8	CCATF0355	0.00	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
9	CCATF0365	0.07	-0.13	-0.10	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19
10	CCATF0375P25	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
11	CCATF03713	-0.11	-0.14	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25	-0.25
12	CCATF0385	0.00	-0.03	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
13	CCATF0203	0.00	-0.01	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
14	CCATF0215	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
15	CCATF0225	-0.01	-0.03	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
16	CCATF0235	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
17	CCATF0245	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
18	CCATF0275	-0.01	-0.03	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
19	CCATF0285	0.10	0.14	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
20	CCATF0295	-0.03	-0.05	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08
21	CCATF0305	-0.03	-0.05	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08
22	CCATF0315	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	CCATMG3	0.00	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
24	CCATRG0485	0.11	0.31	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
25	CCATRG05	0.02	0.21	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
26	CCATRG0495	0.03	-0.01	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06	-0.06
27	CEDAP	-0.34	-0.34	-0.20	-0.01	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17
28	CEDAVN	0.49	-0.01	-0.11	-0.50	-0.59	-0.71	-1.50	-2.00	-2.50	-3.00	-3.50
29	CEDAVR+T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	CEDAVU	-0.62	-0.28	-0.28	-0.43	-0.58	-0.73	-0.88	-1.03	-1.18	-1.33	-1.48
31	CEDF	3.70	5.53	5.07	5.18	4.49	4.40	3.91	2.52	1.13	-0.26	-1.65
32	CEDN	0.82	1.59	1.75	1.48	1.19	0.91	0.63	0.35	0.07	-0.21	-0.49
33	CENC	-0.32	1.05	-1.13	-1.13	-1.13	-1.13	-1.13	-1.13	-1.13	-1.13	-1.13
34	CEHF	2.76	1.59	0.88	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38
35	CENG	0.27	0.59	0.88	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38
36	CEH0+H	-1.39	0.34	1.68	1.98	1.54	1.00	1.00	1.00	1.00	1.00	1.00
37	CEH0	0.10	-2.14	-4.54	-3.64	-1.54	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
38	CEH0	2.24	1.59	1.35	2.24	2.49	2.79	3.24	3.84	4.59	5.49	6.54
39	CEH0	0.10	0.34	1.68	1.98	1.54	1.00	1.00	1.00	1.00	1.00	1.00
40	CEH0	2.76	1.59	0.88	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38
41	CEH0	-1.64	1.09	1.75	1.48	1.19	0.91	0.63	0.35	0.07	-0.21	-0.49
42	CEH0	-77.09	-70.57	-63.02	-102.62	-120.52	-139.62	-155.32	-165.12	-174.92	-184.72	-194.52
43	CEH0	61.91	70.19	77.16	84.56	110.56	135.46	154.66	171.16	187.66	204.16	234.66
44	CEH0	-0.06	-0.34	-0.76	-1.46	-1.88	-1.47	-1.50	-0.90	-0.40	-0.81	-0.89
45	CEH0	0.76	0.59	0.88	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38
46	CEH0	0.06	0.10	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
47	CEH0	-0.77	-0.62	-0.61	-0.61	-0.61	-0.61	-0.61	-0.61	-0.61	-0.61	-0.61
48	CEH0	-0.02	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
49	CEH0	0.07	1.07	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
50	CEH0	40.35	38.59	25.94	25.45	25.47	25.48	25.48	25.48	25.48	25.48	25.48
51	CEH0	-0.20	-0.22	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24

A PRODUCT OF THE NATIONAL BUREAU OF ECONOMIC RESEARCH, 3620 UNIVERSITY DRIVE, ANN ARBOR, MICHIGAN 48106. WITH PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

TABLE 45.30 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1976	1979	1981	1982	1983	1984	1985	1986	1987	1988
1	HORV	0.06	0.74	-0.60	-1.45	-1.10	-0.05	-0.60	-0.35	-0.10	0.15
2	HSPR4H	-119.16	-242.56	-129.01	-78.95	-28.91	21.08	71.06	121.04	171.03	221.08
3	HSPR5H	-408.26	-470.59	-940.52	-1180.34	-1347.22	-1510.48	-1650.12	-1678.51	-1694.11	-1739.39
4	HSPR4H	274.29	826.18	382.72	137.54	180.22	-10.84	96.88	190.28	220.52	137.14
5	IACG	-2.018	-2.065	-0.528	1.467	3.038	3.525	2.653	1.047	0.786	2.491
6	IACM	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
7	IACM24	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
8	IACM25	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
9	IACM32	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
10	IACM33	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
11	IACM34	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
12	IACM35	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
13	IACM36	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
14	IACM37SP2	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
15	IACM37I	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
16	IACM38	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
17	IACM39	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
18	IACM40	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
19	IACM41	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
20	IACM42	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
21	IACM43	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
22	IACM44	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
23	IACM45	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
24	IACM46	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
25	IACM47	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
26	IACM48	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
27	IACM49	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
28	IACM50	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
29	IACM51	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
30	IACM52	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
31	IACM53	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
32	IACM54	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
33	IACM55	-2.018	-2.065	-0.523	1.467	3.038	3.525	2.653	1.047	0.786	2.491
34	IP	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
35	IPMF	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
36	IP1F	-2.09	-1.43	-2.31	-2.31	-2.31	-2.31	-2.31	-2.31	-2.31	-2.31
37	IP1F	-2.09	-1.43	-2.31	-2.31	-2.31	-2.31	-2.31	-2.31	-2.31	-2.31
38	IP1G	-0.21	-0.08	-0.21	-0.21	-0.21	-0.21	-0.21	-0.21	-0.21	-0.21
39	IP1G49	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
40	IP1G49	-4.53	-1.20	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
41	IAC3	12.59	17.61	18.44	19.44	20.44	21.44	22.44	23.44	24.44	25.44
42	IAC3	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
43	KH1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
44	KH1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
45	KH1	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
46	KH1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
47	KH1	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
48	KH1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
49	KH1	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
50	IPV	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
51	IPV	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

A PLOT OF  $\log \rho$  vs.  $\log t$ ,  $\log \sigma$ , OR  $\log \tau$ . THE PERCENTAGE OF SECONDARY DISTRIBUTION.

QUARTERLY ANNUAL AND INDUSTRY FORECASTING MODEL  
 PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

LIVE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NEETIC	40.25	1.45	40.38	42.05	-125.18	-81.32	-41.11	-139.02	-62.54	-10.43	29.05
2	NEETIF	51.98	-17.79	1.66	50.91	-30.29	-60.75	-39.30	-42.57	-38.42	-37.14	-50.58
3	NEETIGV	-1.30	0.00	0.00	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00	-0.00
4	NEETIGVS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	NEETIFD19	13.74	2.76	-12.55	-8.05	-8.04	-7.24	-8.84	-5.84	-7.05	-7.05	-7.05
6	NEETIFD24	35.51	18.44	11.12	21.11	22.71	23.31	25.71	26.31	27.81	30.21	31.81
7	NEETIFD25	-26.95	-35.24	-11.09	-53.08	-63.02	-72.96	-82.90	-92.84	-102.78	-112.72	-112.66
8	NEETIFD32	16.47	10.66	1.56	-5.94	-8.44	-10.94	-13.44	-15.94	-18.44	-20.94	-23.44
9	NEETIFD33	62.35	41.18	20.57	19.57	14.57	9.57	4.57	-0.43	-5.43	-10.43	-15.43
10	NEETIFD34	96.57	81.53	62.47	77.47	72.47	67.47	62.47	57.47	52.47	47.47	42.47
11	NEETIFD35	-20.48	-55.38	-71.74	-113.39	-155.04	-179.69	-204.34	-228.99	-253.64	-278.29	-302.94
12	NEETIFD36	138.63	155.21	161.94	182.28	186.77	191.26	195.75	200.24	204.73	209.22	213.71
13	NEETIFD37SP1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	NEETIFD37SP2	52.44	44.26	36.56	31.85	24.95	18.05	11.15	4.25	-2.65	-9.55	-16.45
15	NEETIFD37	-90.90	-86.61	-73.42	-59.46	-64.06	-68.66	-73.26	-77.86	-82.46	-87.06	-91.66
16	NEETIFD372.9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	NEETIFD38	-12.76	-19.22	-27.33	-37.59	-47.32	-57.05	-66.78	-76.51	-86.24	-95.97	-105.70
18	NEETIFD39	1.84	-7.08	13.11	9.48	8.48	7.47	6.47	5.47	4.47	3.48	2.48
19	NEETIFD40	36.48	-2.99	-7.49	-21.14	-32.83	-40.14	-45.18	-50.88	-52.20	-56.20	-62.19
20	NEETIFD41	-1.17	-0.95	-0.34	-0.54	-0.74	-0.93	-1.13	-1.33	-1.52	-1.72	-1.92
21	NEETIFD42	56.24	55.60	53.66	58.66	63.66	68.66	73.66	78.66	83.66	88.66	93.66
22	NEETIFD43	-89.44	-97.23	-106.51	-117.97	-129.43	-140.89	-152.35	-163.81	-175.27	-186.73	-198.19
23	NEETIFD46	24.32	24.85	23.33	23.17	23.17	23.01	22.85	22.69	22.53	22.37	22.21
24	NEETIFD47	-5.33	-4.36	-18.10	-23.60	-29.10	-29.10	-29.10	-29.10	-29.10	-29.10	-29.10
25	NEETIFD48	21.94	22.12	23.03	23.60	24.59	25.58	26.57	27.56	28.55	29.54	30.53
26	NEETIFD49	2.61	6.49	4.99	0.59	-0.01	-0.61	-1.21	-1.81	-2.41	-3.01	-3.61
27	NEETIFD50	-19.17	-22.11	-23.08	-31.62	-34.96	-38.30	-41.64	-44.98	-48.32	-51.65	-54.98
28	NEETIFD51	2.33	-0.71	-2.94	-8.35	-11.42	-14.43	-17.37	-20.09	-22.31	-24.54	-27.00
29	NEETIFD52	49.42	41.34	10.33	-15.34	-17.20	-17.08	-19.04	-19.57	-18.27	-18.24	-20.63
30	NEETIFD53	-127.05	-182.95	-196.59	-220.60	-203.42	-179.43	-151.53	-121.17	-90.67	-60.08	-30.80
31	NEETIFD54	24.60	81.23	91.76	88.43	83.06	80.46	78.36	77.16	73.26	68.76	63.26
32	NEETIFD55	3.48	-9.74	-27.68	-30.95	-31.65	-30.35	-29.85	-29.15	-27.45	-25.75	-24.25
33	NEETIFD56	-127.98	111.25	-153.43	107.44	-214.62	-154.36	-116.68	-89.94	-64.20	-40.93	-16.98
34	NEETIFD57	33.83	-62.38	-133.14	27.17	-161.91	-44.89	-33.80	-92.40	-59.27	1.57	56.35
35	NEETIFD58	423.09	366.43	348.30	368.69	376.99	385.29	393.59	401.89	410.19	418.49	426.78
36	NEETIFD59	0.00	0.00	0.00	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14	-0.14
37	NEETIFD60	0.00	0.00	0.00	-0.06	-0.12	-0.18	-0.24	-0.30	-0.36	-0.42	-0.48
38	NEETIFD61	0.00	0.00	0.00	-0.09	-0.18	-0.27	-0.36	-0.45	-0.54	-0.63	-0.72
39	NEETIFD62	0.00	0.00	0.00	-0.14	-0.26	-0.34	-0.42	-0.50	-0.58	-0.66	-0.74
40	NEETIFD63	0.00	0.00	0.00	-0.15	-0.30	-0.45	-0.60	-0.75	-0.90	-1.05	-1.20
41	NEETIFD64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	NEETIFD65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	NEETIFD66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	NEETIFD67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	NEETIFD68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	NEETIFD69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	NEETIFD70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	NEETIFD71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	NEETIFD72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	NEETIFD73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
51	NEETIFD74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

A SUMMARY OF RESULTS FOR THE 1978-1988 PERIOD, BY YEAR, IS OBTAINED FOR SECONDARY DISTRIBUTION.



FACTORY ANNUAL AND INDUSTRY FORECASTING MODEL  
 MONTHLY PRODUCTIVITY ATTERNATIVE - DECEMBER 6, 1978

TABLE 45.10 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	IMP-F12M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.30	0.30	0.30	0.30
2	IMP-F12M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19
3	IMP-F13M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.02	-0.05	-0.07	-0.10	-0.12	-0.14	-0.17	-0.19
4	IMP-F13M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.07	-0.14	-0.22	-0.29	-0.36	-0.43	-0.50	-0.58
5	IMP-F16M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.40	-0.60	-0.80	-1.00	-1.00	-1.00	-0.95	-0.90
6	IMP-F16M	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.019	-0.038	-0.057	-0.076	-0.094	-0.113	-0.132	-0.151
7	ILCF16+	4.157	0.457	0.000	0.000	0.000	0.000	0.000	5.045	5.685	5.885	6.085	6.285	6.485	6.685	6.885
8	ILCF20-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.049	0.098	0.146	0.195	0.244	0.293	0.341	0.390
9	ILCF25-34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.118	0.236	0.354	0.472	0.590	0.708	0.826	0.944
10	ILCF35-44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.040	0.060	0.080	0.100	0.120	0.140	0.160
11	ILCF45-54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.110	-0.220	-0.330	-0.440	-0.550	-0.660	-0.770	-0.880
12	ILCF55-64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	ILCF65+	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	NLCF16-19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	NLCF16+	-0.618	-0.056	0.000	0.000	0.000	0.000	0.197	-0.158	-0.073	0.012	0.097	0.182	0.267	0.352	0.437
16	NLCF20-24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.012	-0.025	-0.037	-0.050	-0.062	-0.075	-0.087	-0.100
17	NLCF25-34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	NLCF35-44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	NLCF45-54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.002	0.015	0.027	0.040	0.052	0.065	0.077
20	NLCF55-64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	NLCF65+	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.013	0.020	0.026	0.033	0.039	0.046	0.052
22	NMLTFD24	-0.001	0.004	0.004	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
23	NMLTFD25	-0.027	-0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
24	NMLTFD32	-0.011	-0.009	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
25	NMLTFD33	-0.045	-0.009	0.009	0.009	0.009	0.009	0.009	-0.052	-0.052	-0.052	-0.052	-0.052	-0.052	-0.052	-0.052
26	NMLTFD34	0.000	-0.004	0.000	0.000	0.000	0.000	0.000	-0.009	-0.009	-0.009	-0.009	-0.009	-0.009	-0.009	-0.009
27	NMLTFD35	-0.105	-0.155	-0.155	-0.167	-0.167	-0.167	-0.167	-0.167	-0.167	-0.167	-0.167	-0.167	-0.167	-0.167	-0.167
28	NMLTFD36	0.037	0.062	0.062	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
29	NMLTFD37SP2	0.021	0.032	0.032	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033
30	NMLTFD371	-0.115	-0.041	-0.041	-0.062	-0.062	-0.062	-0.062	-0.062	-0.062	-0.062	-0.062	-0.062	-0.062	-0.062	-0.062
31	NMLTFD39	-0.008	0.006	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
32	NMLTFD20	0.222	0.288	0.288	0.290	0.290	0.290	0.290	0.290	0.290	0.290	0.290	0.290	0.290	0.290	0.290
33	NMLTFD21	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
34	NMLTFD22	0.016	0.023	0.023	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033
35	NMLTFD23	-0.048	-0.071	-0.071	-0.092	-0.092	-0.092	-0.092	-0.092	-0.092	-0.092	-0.092	-0.092	-0.092	-0.092	-0.092
36	NMLTFD26	0.000	0.011	0.011	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
37	NMLTFD27	0.007	0.016	0.016	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003
38	NMLTFD28	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
39	NMLTFD29	-0.008	-0.003	-0.003	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005
40	NMLTFD30	-0.007	-0.002	-0.002	-0.013	-0.013	-0.013	-0.013	-0.013	-0.013	-0.013	-0.013	-0.013	-0.013	-0.013	-0.013
41	NMLTFD31	-0.017	-0.021	-0.021	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014	-0.014
42	NMLTFD32	0.005	0.005	0.005	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
43	NMLTFD33	0.955	0.503	0.503	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
44	NPSPF16-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	NPSPF20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	NPSPF25-34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	NPSPF35-44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	NPSPF45-54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	NPSPF55-64	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	NPSPF65+	1.33	1.35	1.35	1.21	1.21	1.21	1.21	1.16	1.08	1.00	0.92	0.84	0.76	0.68	0.60
51	NPLF16-19	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
52	NPLF20-24	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002

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QUARTERLY ANNUAL AND INDUSTRY FORECASTING MODEL  
 PLANT PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

LINE	VAR LABEL	TABLE 45.30 CONSTANT ADJUSTMENTS											1988
		1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	
1	NALTF25.34	0.0006	0.0006	0.1102	0.1209	0.1189	0.1186	0.1187	0.1155	0.1132	0.1127	0.1143	
2	NALTF35.44	0.0178	0.0104	0.0206	0.0274	0.0254	0.0252	0.0254	0.0220	0.0195	0.0190	0.0207	
3	NALTF45.54	0.0062	0.0005	0.0306	0.0053	0.0035	0.0032	0.0034	0.0004	-0.0017	-0.0022	-0.0006	
4	NALTF55.64	0.0228	0.0006	0.0352	0.0401	0.0063	0.0521	0.0522	0.0540	0.0555	0.0552	0.0523	
5	NALTF65+	0.0008	0.0006	0.0021	0.0021	0.0010	0.0001	-0.0007	-0.0019	-0.0031	-0.0019	-0.0046	
6	NALTF16.19	0.0192	0.0106	0.0175	0.0183	0.0112	0.0078	0.0067	0.0056	0.0071	0.0112	0.0153	
7	NALTF20.24	0.0074	0.0057	0.0078	-0.0032	-0.0052	-0.0058	-0.0050	-0.0041	-0.0026	-0.0044	0.0015	
8	NALTF25.34	0.0021	0.0024	0.0040	0.0007	-0.0011	-0.0015	-0.0005	0.0006	0.0023	0.0046	0.0064	
9	NALTF35.44	0.0000	0.0063	0.0088	-0.0029	-0.0048	-0.0053	-0.0043	-0.0032	-0.0016	0.0008	0.0027	
10	NALTF45.54	-0.0020	0.0066	0.0097	-0.0043	-0.0043	-0.0049	-0.0040	-0.0031	-0.0015	0.0009	0.0029	
11	NALTF55.64	-0.0195	-0.0021	0.0002	-0.0182	-0.0363	-0.0525	-0.0673	-0.0703	-0.0722	-0.0710	-0.0742	
12	NALTF65+	0.0105	0.0059	0.0077	0.0081	0.0029	0.0026	0.0027	0.0028	0.0033	0.0042	0.0049	
13	NRUTF16.19	-0.079	-1.07	-1.42	-3.72	-4.46	-5.00	-5.14	-5.29	-4.85	-3.99	-3.10	
14	NRUTF20.24	-0.10	-0.23	-0.40	-1.28	-1.05	-2.10	-2.22	-2.33	-2.24	-2.01	-1.76	
15	NRUTF25.34	-0.33	-0.34	-0.43	-0.95	-1.30	-1.45	-1.53	-1.60	-1.56	-1.43	-1.28	
16	NRUTF35.44	-0.11	-0.07	-0.15	-0.50	-0.73	-0.84	-0.89	-0.95	-0.93	-0.84	-0.75	
17	NRUTF45.54	0.01	0.10	0.05	-0.20	-0.37	-0.44	-0.48	-0.52	-0.51	-0.45	-0.38	
18	NRUTF55.64	-0.43	-0.21	-0.25	-0.39	-0.48	-0.52	-0.54	-0.56	-0.55	-0.52	-0.49	
19	NRUTF65+	-0.04	0.08	0.04	-0.31	-0.54	-0.65	-0.70	-0.75	-0.71	-0.62	-0.52	
20	NRUTM16.19	-1.36	-1.31	-1.59	-2.59	-3.23	-3.42	-3.40	-3.40	-3.01	-2.31	-1.55	
21	NRUTM20.24	-0.94	-1.13	-1.21	-1.16	-1.08	-0.96	-0.85	-0.75	-0.61	-0.41	-0.19	
22	NRUTM25.34	2.23	2.39	2.35	1.40	0.63	0.13	-0.26	-0.65	-0.83	-0.64	-0.45	
23	NRUTM35.44	1.43	1.57	1.34	0.72	0.18	-0.17	-0.46	-0.76	-0.91	-0.93	-0.96	
24	NRUTM45.54	1.35	1.82	1.09	0.46	-0.06	-0.40	-0.68	-0.98	-1.14	-1.17	-1.21	
25	NRUTM55.64	-0.09	0.00	-0.02	-0.10	-0.16	-0.18	-0.20	-0.21	-0.21	-0.20	-0.18	
26	NRUTM65+	0.89	0.88	0.84	0.51	0.28	0.17	0.10	0.04	0.06	0.14	0.22	
27	NUIF16.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
28	NUIF20.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
29	NUIF25.34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
30	NUIF35.44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
31	NUIF45.54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
32	NUIF55.64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
33	NUIF65+	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
34	NUM16.19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
35	NUM20.24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
36	NUM25.34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
37	NUM35.44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
38	NUM45.54	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
39	NUM55.64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
40	NUM65+	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

A PRODUCT OF WHARTON EFA INC., 3624 MARKET ST., PHILA., PA 19104. WRITTEN PERMISSION MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.





UNITED STATES ANNUAL AND QUARTERLY FORECASTING MODEL  
1960-1970 PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1970

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	PXVGF035	8.06	7.66	9.03	10.03	11.03	12.03	13.03	14.03	15.03	16.03	17.03
2	PXVGF036	13.01	15.03	16.77	21.77	24.77	27.77	30.77	33.77	36.77	39.77	42.77
3	PXVGF037SP1	11.06	11.74	14.03	16.22	17.70	19.36	21.11	22.80	24.56	26.28	28.04
4	PXVGF037SP2	9.51	9.92	12.61	14.61	16.61	18.61	20.61	22.61	24.61	26.61	28.61
5	PXVGF0371	11.68	14.21	17.42	19.92	22.42	24.92	27.42	29.92	32.42	34.92	37.42
6	PXVGF038	-0.38	-11.71	-13.39	-13.39	-13.39	-13.39	-13.39	-13.39	-13.39	-13.39	-13.39
7	PXVGF039	2.43	0.51	7.50	10.33	14.55	18.94	23.39	27.77	32.22	36.65	41.09
8	PXVGF040	-1.54	-1.84	-3.49	-3.48	-3.48	-3.48	-3.48	-3.48	-3.48	-3.48	-3.48
9	PXVGF041	7.05	14.67	18.19	22.19	26.14	30.19	34.19	38.19	42.19	46.19	50.19
10	PXVGF042	9.65	11.52	14.10	16.09	18.09	20.09	22.09	24.09	26.09	28.09	30.09
11	PXVGF043	5.00	3.70	1.99	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
12	PXVGF044	20.38	19.43	24.18	26.14	28.18	30.18	32.18	34.18	36.18	38.18	40.18
13	PXVGF045	10.42	9.04	1.04	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
14	PXVGF046	4.64	10.99	11.06	13.06	15.06	17.06	19.06	21.06	23.06	25.06	27.06
15	PXVGF047	1.33	0.73	-3.76	-4.76	-5.76	-6.76	-7.76	-8.76	-9.76	-10.76	-11.76
16	PXVGF048	2.09	-0.37	-5.52	-7.53	-9.53	-11.53	-13.53	-15.53	-17.53	-19.53	-21.53
17	PXVGF049	-1.04	-2.42	-2.10	-2.70	-3.30	-3.90	-4.50	-5.10	-5.70	-6.30	-6.90
18	PXVGF050	-1.22	-0.24	-7.18	-10.38	-13.58	-16.78	-19.98	-23.18	-26.38	-29.58	-32.78
19	PXVGF051	11.25	15.26	22.88	31.88	40.88	49.88	58.88	67.88	76.88	85.88	94.88
20	PXVGF052	2.58	0.44	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
21	PXVGF053	1.02	1.62	2.08	2.24	2.40	2.56	2.72	2.88	3.04	3.20	3.36
22	PXVGF054	37.03	38.81	35.55	39.66	43.23	47.12	51.36	55.98	61.02	66.51	72.50
23	PXVGF055	24.72	40.11	77.90	110.90	143.23	175.90	201.90	223.90	245.90	266.90	287.90
24	PXVGF056	0.005	-0.001	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005
25	PXVGF057	0.036	-0.018	2.040	2.040	2.040	2.040	2.040	2.040	2.040	2.040	2.040
26	PXVGF058	0.102	0.111	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114
27	PXVGF059	-15.10	-4.46	9.23	9.28	12.58	15.18	16.78	19.48	22.00	25.24	28.97
28	PXVGF060	0.49	0.76	0.91	1.31	1.71	2.11	2.51	2.91	3.31	3.71	4.11
29	PXVGF061	-0.09	-0.25	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26
30	PXVGF062	0.91	1.52	1.48	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
31	PXVGF063	9.19	6.40	-0.69	-12.34	-27.70	-43.39	-63.19	-79.60	-92.14	-101.72	-111.55
32	PXVGF064	1.11	-0.10	-2.40	-2.40	-2.40	-2.40	-2.40	-2.40	-2.40	-2.40	-2.40
33	PXVGF065	0.93	15.33	19.83	25.70	31.49	39.45	46.58	59.15	72.96	86.03	96.67
34	PXVGF066	-2.51	-10.29	-13.47	-14.47	-15.47	-16.47	-17.47	-18.47	-19.47	-20.47	-21.47
35	PXVGF067	0.61	1.40	2.42	2.92	3.42	3.92	4.42	4.92	5.42	5.92	6.42
36	PXVGF068	0.51	0.81	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
37	PXVGF069	-0.05	-0.20	0.23	0.13	0.03	-0.07	-0.17	-0.27	-0.37	-0.47	-0.57
38	PXVGF070	-0.05	-0.92	-3.44	-5.44	-5.44	-5.44	-5.44	-5.44	-5.44	-5.44	-5.44
39	PXVGF071	0.27	-1.00	-1.61	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60	-1.60
40	PXVGF072	8.01	6.59	2.95	-0.48	-3.20	-6.63	-10.32	-16.53	-24.59	-31.01	-39.05
41	PXVGF073	-2.21	-3.17	-4.18	-4.18	-4.18	-4.18	-4.18	-4.18	-4.18	-4.18	-4.18
42	PXVGF074	-3.97	-5.57	-7.33	-11.82	-12.42	-13.03	-13.63	-14.23	-14.83	-15.43	-16.03
43	PXVGF075	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
44	PXVGF076	-14.36	-28.95	-33.91	-40.55	-48.49	-57.99	-69.36	-82.95	-98.21	-113.66	-129.00
45	PXVGF077	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
46	PXVGF078	1.46	-0.90	-2.78	-1.80	-0.80	-0.80	-0.80	-0.80	-0.80	-0.80	-0.80
47	PXVGF079	-0.92	-0.87	-1.42	-2.02	-2.62	-3.22	-3.82	-4.42	-5.02	-5.62	-6.22
48	PXVGF080	-6.91	-5.14	-13.33	-23.06	-30.35	-39.84	-43.93	-51.78	-59.63	-65.28	-70.93
49	PXVGF081	-0.09	0.60	-0.40	-1.40	-2.40	-3.40	-4.40	-5.40	-6.40	-7.40	-8.40
50	PXVGF082	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
51	PXVGF083	-0.28	-5.80	-12.75	-13.03	-16.03	-15.03	-16.03	-17.03	-18.03	-19.03	-20.03

A PRODUCT OF UNITED STATES ANNUAL AND QUARTERLY FORECASTING MODEL, DECEMBER 6, 1970. OTHER REVISIONS MUST BE OBTAINED FOR SECONDARY DISTRIBUTION.

SECTION ANNUAL AND INDUSTRY FORECASTING MODEL  
 MONTHLY PRODUCTIVITY ALTERNATIVE - DECEMBER 2, 1978

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TXCS31S	4.56	5.90	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89	5.89
2	TXUPFV1P8	0.18	-0.53	-0.85	-0.85	-0.85	-0.85	-0.85	-0.85	-0.85	-0.85	-0.85
3	TXUPFEN	0.724	7.953	0.814	3.814	2.814	1.814	0.814	-0.186	-1.186	-2.186	-3.186
4	TXUPFEN	-1.043	-1.781	0.814	-0.814	-0.814	-0.814	-0.814	-0.814	-0.814	-0.814	-0.814
5	TXUPFY1	-0.0108	-0.0165	-0.0126	-0.0058	0.0003	0.0050	0.0082	0.0091	0.0095	0.0095	0.0099
6	TXUPFY2	-0.0042	-0.0105	-0.0077	-0.0022	0.0030	0.0070	0.0097	0.0102	0.0102	0.0102	0.0099
7	TXUPFY3	0.0075	-0.0035	-0.0022	-0.0004	0.0030	0.0067	0.0085	0.0085	0.0076	0.0065	0.0058
8	TXUPFY4	0.0004	0.0002	0.0008	0.0030	0.0055	0.0078	0.0092	0.0082	0.0073	0.0063	0.0056
9	TXUPFY5	-0.0532	-0.0830	-0.1059	-0.1395	-0.1692	-0.1994	-0.2317	-0.2712	-0.3069	-0.3401	-0.3715
10	TXUPFY6	-0.1338	-0.1478	-0.1527	-0.1579	-0.1637	-0.1697	-0.1762	-0.1831	-0.1904	-0.1981	-0.2060
11	TXUPFY7	-0.0943	-0.0972	-0.1007	-0.1041	-0.1074	-0.1107	-0.1139	-0.1171	-0.1203	-0.1235	-0.1267
12	TXUPFY8+	-0.0787	-0.0838	-0.0899	-0.0960	-0.1021	-0.1082	-0.1143	-0.1204	-0.1265	-0.1326	-0.1387
13	WRCGVG	-2.13	-3.18	-1.65	-2.27	-2.86	-3.45	-4.04	-4.63	-5.22	-5.81	-6.40
14	WRCAGS	8.359	9.050	8.561	8.562	7.920	6.600	4.720	2.159	-1.042	-4.879	-9.358
15	WRCFNS	-4.600	-4.777	-4.785	-6.656	-7.063	-6.900	-6.494	-5.452	-4.523	-3.821	-3.312
16	WRCGVFS	-10.202	-9.474	-6.968	-9.582	-11.049	-12.759	-17.018	-20.130	-23.252	-26.530	-30.054
17	WRCVNS	-0.831	-8.260	-14.008	-12.879	-11.879	-10.879	-10.879	-9.879	-9.879	-9.879	-9.879
18	WRCMF024S	-0.200	-0.066	-0.027	-0.027	-0.027	-0.028	-0.028	-0.028	-0.028	-0.028	-0.027
19	WRCMF025S	-0.007	0.104	0.087	0.117	0.130	0.143	0.156	0.169	0.182	0.195	0.205
20	WRCMF032S	-0.047	-0.017	-0.046	-0.059	-0.059	-0.059	-0.059	-0.059	-0.059	-0.059	-0.059
21	WRCMF033S	0.009	0.172	0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131
22	WRCMF034S	-0.156	-0.088	-0.035	-0.085	-0.086	-0.086	-0.086	-0.086	-0.086	-0.086	-0.086
23	WRCMF035S	0.264	0.049	0.031	0.081	0.081	0.081	0.081	0.081	0.081	0.081	0.081
24	WRCMF036S	-0.207	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
25	WRCMF037SP28	-0.024	0.008	0.008	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
26	WRCMF0371S	-1.012	-0.976	-1.073	-1.173	-1.173	-1.173	-1.173	-1.173	-1.173	-1.173	-1.173
27	WRCMF038S	0.083	0.189	0.215	0.215	0.215	0.215	0.215	0.215	0.215	0.215	0.215
28	WRCMF039S	0.279	0.061	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082
29	WRCMF020S	0.249	0.123	0.027	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047
30	WRCMF021S	-0.109	-0.089	-0.070	-0.090	-0.090	-0.090	-0.090	-0.090	-0.090	-0.090	-0.090
31	WRCMF022S	-0.135	-0.137	-0.128	-0.133	-0.133	-0.133	-0.133	-0.133	-0.133	-0.133	-0.133
32	WRCMF023S	-0.316	-0.209	-0.324	-0.390	-0.390	-0.390	-0.390	-0.390	-0.390	-0.390	-0.390
33	WRCMF024S	0.137	0.155	0.096	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078
34	WRCMF025S	-0.043	0.174	0.080	0.040	0.100	0.110	0.120	0.130	0.140	0.150	0.160
35	WRCMF026S	0.300	0.358	0.528	0.587	0.407	0.427	0.447	0.467	0.487	0.507	0.527
36	WRCMF027S	-0.350	0.036	0.020	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
37	WRCMF028S	0.083	0.116	0.096	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097
38	WRCMF029S	0.305	0.182	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148	-0.148
39	WRCMF030S	-12.818	-8.155	-12.719	-13.670	-14.570	-15.470	-16.370	-17.270	-18.170	-19.070	-20.070
40	WRCMF031S	2.052	-7.250	-2.304	-3.543	-4.785	-6.025	-7.265	-8.504	-9.744	-10.984	-12.224
41	WRCMF032S	-0.703	-6.795	-2.556	-6.436	-5.616	-4.796	-3.976	-3.156	-2.336	-1.516	-0.696
42	XVGGC	-0.33	-0.66	-0.79	-0.24	-0.69	-1.14	-1.59	-2.04	-2.49	-2.94	-3.39
43	XVGGC	0.31	0.07	-0.00	0.84	1.70	2.55	3.40	4.25	5.10	5.95	6.80
44	XVGGC-65+6	-0.50	0.82	0.74	1.24	1.75	2.25	2.75	3.25	3.75	4.25	4.75
45	XVGGC-65+6	1.03	0.00	0.02	1.01	1.22	1.42	1.63	1.83	2.03	2.23	2.44
46	XVGGC-65+6	-0.00	-0.00	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22	-1.22
47	XVGGC-65+6	-0.32	-0.70	-1.00	-0.00	-0.50	-1.00	-1.50	-2.00	-2.50	-3.00	-3.50
48	XVGGC-65+6	0.02	0.02	1.30	1.50	1.74	1.98	2.22	2.46	2.70	2.94	3.18
49	XVGGC-65+6	-0.07	0.00	0.00	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
50	XVGGC-65+6	1.15	0.60	1.30	1.01	1.47	1.53	1.59	1.65	1.71	1.77	1.84
51	XVGGC-65+6	1.17	1.72	2.60	2.60	2.60	3.20	3.50	3.80	4.10	4.40	4.80

A PRODUCT OF SECTION 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

WHARTON ANNUAL AND INDUSTRY FORECASTING MODEL  
 OUTPUT PRODUCTIVITY ALTERNATIVE - DECEMBER 6, 1978

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	XVGMFD34	-0.38	0.38	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
2	XVGMFD35	0.43	1.49	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63
3	XVGMFD36	0.70	1.43	1.11	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
4	XVGMFD37	-0.04	0.47	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
5	XVGMFD37	1.34	2.26	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17
6	XVGMFD38	-0.10	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
7	XVGMFD39	-0.20	-0.09	-0.12	-0.12	-0.07	-0.02	0.03	0.08	0.13	0.18	0.23
8	XVGMFD40	1.08	1.74	1.63	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64
9	XVGMFD41	-0.12	-0.25	-0.33	-0.33	-0.33	-0.33	-0.33	-0.33	-0.33	-0.33	-0.33
10	XVGMFD42	-0.48	-0.76	-1.13	-1.23	-1.34	-1.44	-1.54	-1.64	-1.73	-1.83	-1.93
11	XVGMFD43	0.22	-0.04	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26
12	XVGMFD44	0.05	0.32	0.34	0.45	0.55	0.65	0.75	0.85	0.95	1.05	1.15
13	XVGMFD45	0.02	1.00	1.62	1.82	2.02	2.22	2.42	2.62	2.82	3.02	3.22
14	XVGMFD46	0.22	0.12	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
15	XVGMFD47	-0.14	-0.14	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05
16	XVGMFD48	-0.32	-0.19	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07	-0.07
17	XVGMFD49	-0.03	-0.04	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08
18	XVGMFD50	0.05	0.14	0.18	0.27	0.36	0.45	0.54	0.63	0.72	0.81	0.90
19	XVGMFD51	0.39	0.69	0.94	1.17	1.41	1.65	1.89	2.13	2.37	2.61	2.85
20	XVGMFD52	3.21	0.47	5.34	6.27	7.19	8.11	9.03	9.95	10.87	11.79	12.71
21	XVGMFD53	0.33	0.58	0.90	1.01	1.12	1.23	1.34	1.45	1.56	1.67	1.78
22	XVGMFD54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	XVGMFD55	-0.03	-0.07	-0.17	-0.19	-0.22	-0.24	-0.26	-0.29	-0.31	-0.34	-0.36
24	XVGMFD56	0.03	-0.65	-1.34	-0.08	-3.00	-3.98	-5.55	-6.73	-7.63	-8.39	-8.99
25	XVGMFD57	-0.57	-0.61	-0.53	-0.43	-0.33	-0.23	-0.13	-0.03	0.07	0.17	0.27
26	XVGMFD58	-0.50	-0.58	-0.61	-0.55	-0.49	-0.43	-0.37	-0.31	-0.25	-0.19	-0.13
27	XVGMFD59	0.00	-0.27	-0.81	-1.09	-1.37	-1.65	-1.93	-2.21	-2.49	-2.77	-3.05
28	XVGMFD60	0.04	-0.10	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24
29	XVGMFD61	-0.07	-0.02	-1.27	-1.30	-1.33	-1.36	-1.39	-1.42	-1.45	-1.48	-1.51
30	XVGMFD62	-0.12	-0.18	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27	-0.27
31	XVGMFD63	0.06	0.08	0.09	0.13	0.17	0.21	0.25	0.29	0.33	0.37	0.41
32	XVGMFD64	1.14	2.24	3.50	5.38	6.98	8.38	9.88	11.58	13.68	15.98	18.28
33	XVGMFD65	-0.54	-2.21	-2.29	-2.80	-3.30	-3.79	-4.29	-4.79	-5.29	-5.79	-6.29
34	XVGMFD66	1.33	-5.08	-7.63	-7.63	-7.43	-7.22	-7.02	-6.82	-6.62	-6.41	-6.21
35	XVGMFD67	2.15	2.60	0.83	1.55	2.28	3.00	3.72	4.45	5.17	5.89	6.61
36	XVGMFD68	-3.50	-4.34	-4.97	-4.85	-4.72	-4.60	-4.48	-4.36	-4.24	-4.12	-3.99
37	XVGMFD69	0.72	1.63	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
38	XVGMFD70	10.04	13.54	13.67	19.17	24.67	30.17	35.67	41.17	46.67	52.17	57.67
39	XVGMFD71	0.743	1.614	2.905	3.306	3.950	4.313	4.516	4.742	4.863	4.809	4.627

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